Ventura-Santa Barbara Counties Intertie Project

Revised Draft

Initial Study – Mitigated Negative Declaration

prepared by

Casitas Municipal Water District
1055 North Ventura Avenue
Oak View, California 93022
Contact: Julia Aranda, Engineering Manager

prepared with the assistance of

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

November 2022

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
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Acronyms and Abbreviations

AB	Assembly Bill
ACS	United State Census Bureau's American Community Survey
AE	Agriculture Exclusive zone
AEP	Association of Environmental Professionals
Basin	South Central Coast Air Basin
Basin Plan	Central Coastal Basin Water Quality Control Plan
BGI	Bajada Geosciences, Inc.
BMP	Best Management Practice
BPS	Booster Pump Station
BSA	Biological Study Area
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CA	Coastal Agriculture zone
CALFIRE	California Department of Forestry and Fire Protection
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
Casitas	Casitas Municipal Water District
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
CMA	Congestion Management Agency
CMP	Congestion Management Plan
CRHR	California Register of Historical Resources
CH_4	methane
CNEL	community noise equivalent level
CO	carbon monoxide
CO_2	carbon dioxide

CO_2e	carbon dioxide equivalent
CVWD	Carpinteria Valley Water District
CWA	Clean Water Act
CWRP	Comprehensive Water Resources Plan
dB	decibel
dB(A)	A-weighted decibel
DCM	DCM Consulting, Inc.
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
ECAP	County of Santa Barbara's Energy and Climate Action Plan
EIA	United States Energy Information Administration
EO	Executive Order
ESHA	environmentally sensitive habitat area
ERMs	emission reduction measures
FEMA	Federal Emergency Management Agency
FTA	Federal Transit Administration
GHG	greenhouse gas
HDD	horizontal directional drilling
HMMP	Habitat Mitigation and Monitoring Plan
HMMSCP	Hazardous Materials Management and Spill Control Plan
HP	horsepower
IS-MND	Initial Study-Mitigated Negative Declaration
kWh	kilowatt-hours
lbs/day	pounds per day
L_{eq}	one-hour equivalent noise level
LF	linear feet
MBTA	Migratory Bird Treaty Act
MLD	most likely descendant
MS4	Municipal Separate Storm Sewer Systems
MT	metric tons
NAAQS	National Ambient Air Quality Standards
NHPA	National Historic Preservation Act
N_2O	nitrous oxide

NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Properties
OS	Open Space zone
$PM_{2.5}$	particulate matter 2.5 microns or less in diameter
PM_{10}	particulate matter 10 microns or less in diameter
ppv	peak particle velocity
PRC	Public Resources Code
ROC	reactive organic compound
Rms	root mean square
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SBCAPCD	Santa Barbara County Air Pollution Control District
SCADA	supervisory control and data acquisition
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SHPO	State Historic Preservation Officer
SO_X	sulfur oxides
SR	State Route
SRA	State Responsibility Area
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TMP	Traffic Management Plan
tpy	tons per year
USEPA	United States Environmental Protection Agency
VCAPCD	Ventura County Air Pollution Control District
VCTC	Ventura County Transportation Commission
VMT	vehicle miles traveled
VOC	volatile organic compound
WEAP	Worker Environmental Awareness Program

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Initial Study

1. Project Title

Ventura-Santa Barbara Counties Intertie

2. Lead Agency Name and Address

Casitas Municipal Water District
1055 North Ventura Avenue
Oak View, California 93022

3. Contact Person and Phone Number

Julia Aranda, PE
Engineering Manager
Casitas Municipal Water District
Phone: (805) 649-2251 ext. 107; email: jaranda@casitaswater.com

4. Project Location

The project site is located in the unincorporated southwestern portion of Ventura County and the unincorporated southeastern portion of Santa Barbara County and is approximately 0.3 mile east of the city of Carpinteria. The project site traverses State Route (SR) 192 and SR 150, both of which are under the jurisdiction of the California Department of Transportation (Caltrans). Figure 1 shows the project site in the regional context. Figure 2 shows an overview of the project site, including the pipeline alignment, booster pump station sites, and infrastructure improvement areas. Figure 3 shows the western portion of the project site, which includes the pipeline alignment and Booster Pump Station A (BPS-A) site. Figure 4 shows the Booster Pump Station B (BPS-B) site.

5. Project Sponsors' Names and Addresses

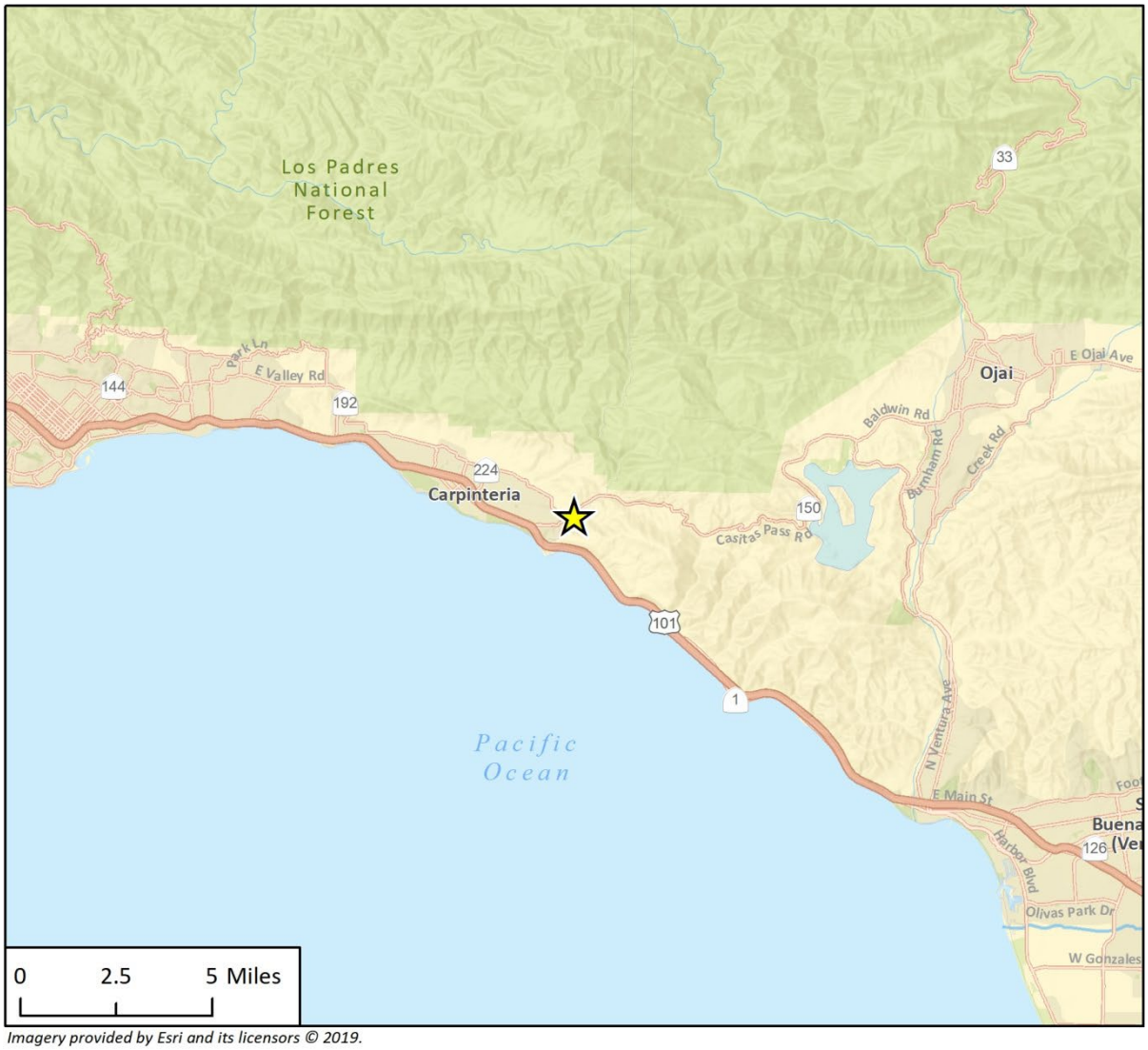
CEQA Lead Agency

Casitas Municipal Water District
1055 North Ventura Avenue
Oak View, California 93022

Project Co-sponsor

Carpinteria Valley Water District
1301 Santa Ynez Avenue
Carpinteria, California 93013

Figure 1 Regional Project Location



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Project Location

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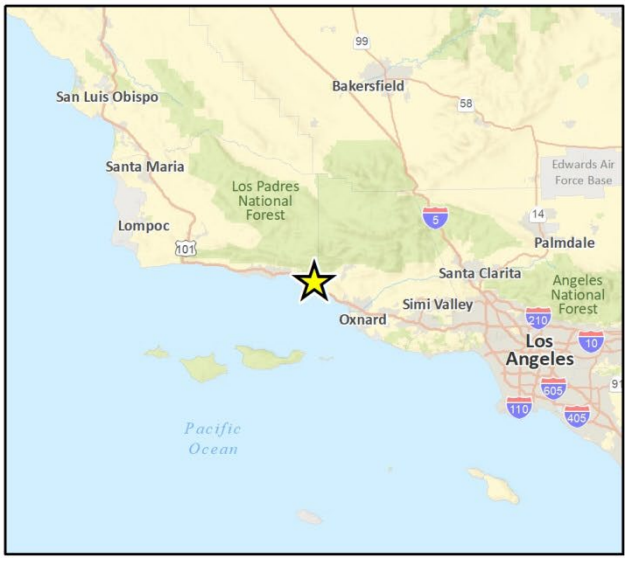

Figure 2 Overview of Project Site

Figure 3 Proposed Pipeline Alignment and Booster Pump Station Site A

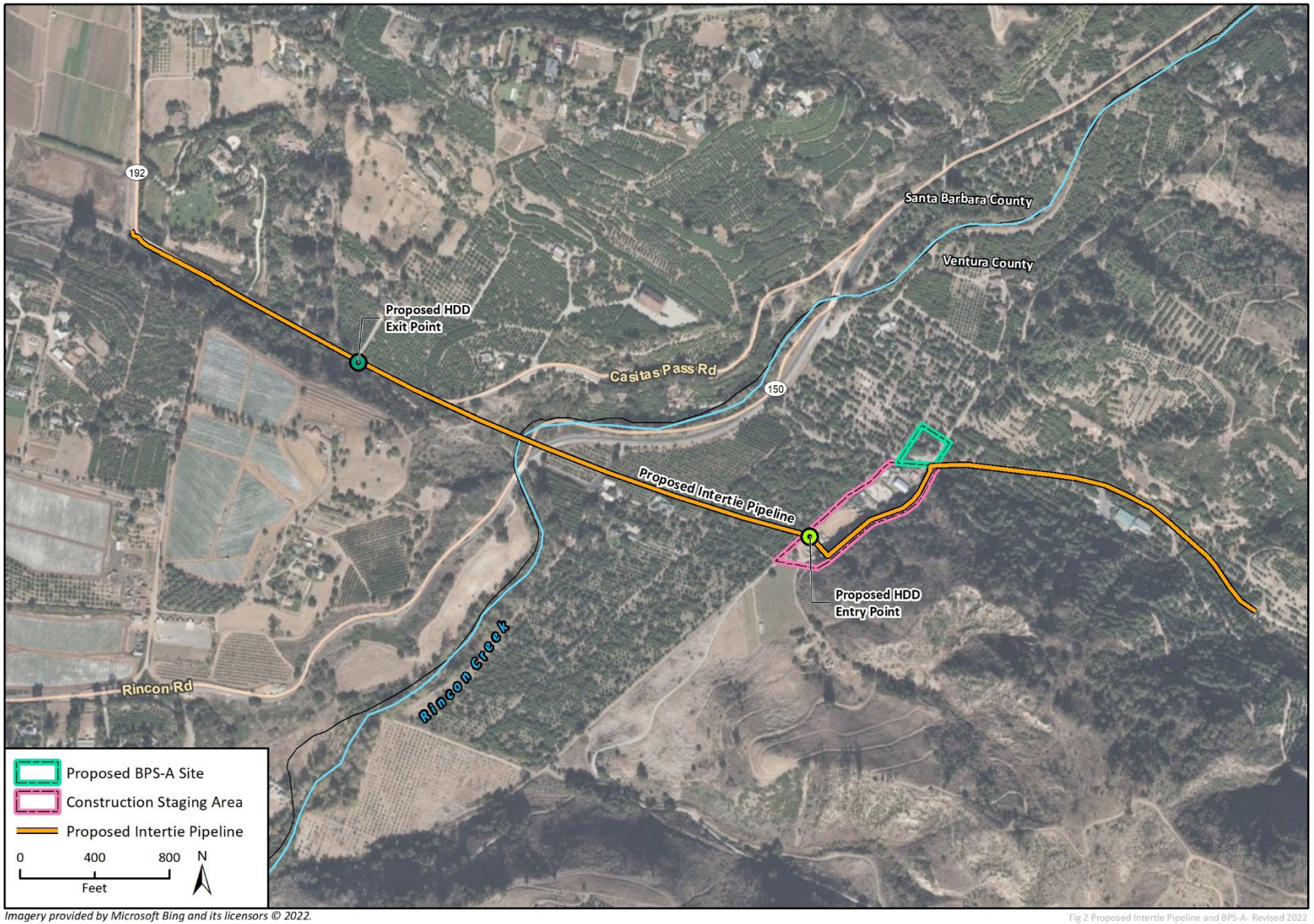

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Fig 2 Proposed Intertie Pipeline and BPS-A- Revised 2022

Figure 4 Proposed Booster Pump Station Site B

6. General Plan Designation

Ventura County: Open Space

Santa Barbara County: AC (Agricultural Commercial/Minimum parcel size – 40 acres), A-I-10 (Agriculture I/Minimize parcel size-10 aces)

7. Zoning

Ventura County: Agricultural Exclusive (AE-40 ac), Coastal Agriculture (CA-40 ac-sdf), Open Space (OS-40 ac, OS-80 ac/SRP, OS-80 ac/TRU/DKS, OS-160 ac)

Santa Barbara County: AG-I-5 (Agriculture I/Minimum Lot Size – 5 Acres gross), AG-I-10 (Agriculture I/Minimum Lot Size – 10 Acres gross)

8. Description of Project

The Ventura-Santa Barbara Counties Intertie Project (herein referred to as "proposed project" or "project") involves the construction and operation of potable water infrastructure to connect the Casitas and Carpinteria Valley Water District (CVWD) water transmission systems. The proposed project includes approximately 7,100 linear feet (LF; 1.3 miles) of new 16-inch-diameter potable water pipeline, two new booster pump stations, replacement of select portions of the existing Rincon Main, and improvements to infrastructure at other existing Casitas facilities. The pipeline would traverse the boundary between Ventura and Santa Barbara counties and act as a two-way intertie to allow the transfer of water between Casitas and CVWD, as necessary.

Comprehensive Water Resources Plan Background

In June 2020, Casitas developed a Draft Comprehensive Water Resources Plan (CWRP) to identify, analyze, and prioritize strategies for providing a reliable water supply to meet the future needs of Casitas' customers. The Draft CWRP was prepared in response to the recent extended drought in California, which resulted in historic low storage levels in Lake Casitas, and in response to concerns about the impacts of climate change on future supplies. With stakeholder engagement, Casitas developed an analysis of future system supplies and demands to evaluate future water needs. The Draft CWRP included goals for long-term water supply augmentation, short-term risk management, and portfolio diversification. These goals informed the investigation and prioritization of future water supply options. The Draft CWRP identified all potential supply options, then screened those to select the most feasible options, then combined those feasible options into portfolios (Casitas 2020).

The proposed project is identified as one of the water supply options in the Draft CWRP's recommended water supply portfolio. It is the only option addressing all three goals for long-term water supply augmentation, short-term risk mitigation, and portfolio diversification (Casitas 2020).

Project Objectives

The proposed project would facilitate the transfer of water between Casitas and CVWD, thereby improving regional water supply reliability. Ventura and Santa Barbara counties are susceptible to natural disasters such as wildfires, landslides, and earthquakes. The project would allow Casitas and

Santa Barbara County water purveyors to transfer local potable water supplies in either direction, as necessary, and improve the resiliency of the local water distribution network. In addition, the project would provide Casitas with a means of accessing its State Water Project water allocations to supplement existing supplies resulting in a more resilient water supply portfolio. The proposed project would not be utilized to increase the amount of water currently being supplied to existing customers or to provide water to areas currently not serviced by Casitas or CVWD.

Project Description

This section describes the specific facilities included in the proposed project.

Pipeline

ALIGNMENT

The proposed project would include approximately 7,100 LF of 16-inch-diameter, underground potable water pipeline. Up to approximately 4,800 LF of the proposed pipeline would be constructed in unincorporated Ventura County; the remainder of the pipeline would be constructed in unincorporated Santa Barbara County. The western terminus of the pipeline would connect to the existing CVWD 15-inch pipeline at the southeastern corner of Lake Jocelyn, located immediately northwest of the southernmost portion of the segment of SR 192 in Santa Barbara County which traverses north-south. From Lake Jocelyn, the pipeline would traverse southeast along SR 192, cross underneath Rincon Creek and SR 150, and extend east to connect to the existing Rincon Pipeline approximately 0.5 miles east of Rincon Creek.

The crossing of Rincon Creek and SR 150 would be completed via underground horizontal directional drilling (HDD) construction. After crossing Rincon Creek and SR 150, the pipeline would continue southeast through an orchard for approximately 1,500 LF before turning north at Avocado Hill Road, a private unpaved access road. The pipeline would continue for approximately 800 LF in Avocado Hill Road, where the pipeline would connect with another private, unpaved access road. The pipeline would turn east at the access road and continue for 2,000 LF, where the pipeline would connect to the existing Rincon Main Pipeline.

The project also includes the replacement of four portions of the existing Rincon Main Pipeline with insufficient capacity, referred to as Replacements 1a, 1b, 1c, and 2a. Replacements 1a, 1b, and 1c are located directly east of the proposed BPS-A site, within the existing orchard. Replacements 1a, 1b, and 1c would include the replacement of approximately 10 LF, 200 LF, and 100 LF of the Rincon Main Pipeline, respectively. Replacement 2a is located directly east of the proposed BPS-B site, and would include the replacement of approximately 210 LF of the Rincon Main Pipeline.

CONSTRUCTION

Materials required for pipeline construction include: pipe; fittings and appurtenances; sand, cement slurry, and natural earth material for backfill; and paving materials. All materials would be delivered to the staging areas at the beginning of construction and materials needed for the day's work would be taken from the staging areas to the work site. The staging areas for pipeline construction would be at existing, previously disturbed areas near the proposed alignment or along the pipeline alignment within paved roadways or the road shoulder. It is estimated for each 1,000 LF of pipeline construction, five material deliveries per day would occur.

Proposed pipeline construction would primarily entail conventional, open-trench excavation within existing roadways. Open-trench excavation is a construction method typically utilized to install pipelines and their appurtenant structures, which include blow-offs, service meters, valves, and vaults. In general, the process of pipeline construction in a roadway would consist of site preparation, excavation and shoring, pipe installation and backfilling, and street restoration (where applicable). Pipeline construction using open-trench method requires the use of an excavator, wheeled loader, dump truck, and vibrating compactor.

The following is a description of the phases of construction for open-cut trenching:

- **Site Preparation.** The existing pavement along the pipeline alignment is cut with a concrete saw or otherwise broken and removed using jackhammers, pavement breakers, and loaders. Other similar equipment may be used. The pavement is removed from the project site and recycled or disposed of at an appropriate facility.
- **Excavation and Shoring.** A trench is excavated along the alignment using backhoes, excavators, or other types of excavation equipment. Portions of the trench adjacent to existing utilities may be manually excavated. Approximately 2,900 cubic yards of soil and pavement[1] would be hauled away and disposed of at an appropriate facility. The remainder of the excavated soil would be temporarily stored adjacent to the trenches or stored at staging areas to be used as trench backfill.

  The pipeline requires a minimum 30-inch width at its deepest location to a five-foot-wide trench at the surface in which to work and place the pipe. Trenches would generally be no more than six feet deep, unless there is a need to cross another utility or a trenchless-construction crossing requires a deeper, rectangular boring pit. If crossing another utility is required, the proposed trench depth depends on the depth of the existing utility and required clearance (generally, at least one foot) between the proposed pipeline and the existing utility line. Maximum trench depth would be approximately ten feet in these areas.
- **Pipe Installation and Backfilling.** Once the trench is excavated and shored (if necessary), the pipe and backfill material are placed in the trench. Backfill material around pipeline includes sand bedding, imported aggregate material, or a sand-cement slurry. Such material is placed at least four inches under the pipe, six inches on each side, and one foot above the pipe. Generally, every linear foot of pipeline requires 0.11 cubic foot of sand (i.e., 1,000 feet of pipeline requires 110 cubic feet of sand). Assuming approximately two feet of cover over the sand backfill, required earth (soil) backfill is 0.22 cubic foot per linear foot of pipeline. The remaining one foot of trench backfill is comprised of paving materials (see Street Restoration below). At the end of each workday, the trench is covered with steel plates for public safety and so traffic can resume use of the roadway in both directions.
- **Street Restoration.** Final paving is performed once the entire pipeline segment is installed. Paving progresses at the rate of approximately 1,000 square feet per day. Paving requires a wheeled loader, paving machine, and roller. Once the pavement is restored, traffic delineation (striping) is also restored.

[1] This approximated 2,900 cubic yards of soil and pavement is based on open-cut trenching for the proposed pipeline, which equates to approximately 4,400 LF of open-cut trenching (not including the segment of pipeline to be installed under Rincon Creek via trenchless crossing). It is estimated that approximately 0.65 cubic yard of soil and/or pavement would be hauled off-site for disposal (i.e., not used as trench backfill) per linear foot of pipeline installed (4,400 LF x 0.65 cubic yard per LF of open-cut trenching = 2,900 cubic yards of soil and/or pavement to be hauled off site).

Typical open-cut pipeline construction, including trenching, installing the pipe, backfilling, and temporary plating, is accomplished at approximately 200 to 300 LF per day.

CREEK CROSSING

The crossing of Rincon Creek would occur using the trenchless HDD method. Trenchless HDD construction involves excavating an entrance pit on one side of the creek and a receiving pit on the opposite side of the creek. A pilot hole is drilled along the pipeline alignment, followed by the enlarging of the hole by passing a larger cutting tool (back reamer) through the hole. The pipe is then placed in the hole beneath the creek using a drill stem; the back reamer pulls the pipe into place behind it. HDD requires the use of drilling fluid (comprised of a mixture of water and bentonite or polymer) to remove cuttings, stabilize the bore hole, cool the cutting head, and lubricate the passage of the pipe. Used drilling fluid is collected in a reclaimer machine to remove drill cuttings and maintain the proper viscosity during reuse of the fluid. Upon completion of pipe installation, the entrance pit and receiving pit are backfilled and the disturbed land or habitat is restored. The project-specific SWPPP would include measures to avoid/minimize potential impacts to water quality from this method of creek crossing, including, but not limited to, ensuring the drilling fluid is properly contained and avoiding frac-outs.[2] Approximately 500 cubic yards of spoils would be removed during HDD construction, based on a 30-inch borehole.

Booster Pump Stations

The proposed project also involves the construction and operation of two booster pump stations: BPS-A and BPS-B. BPS-A would consist of an approximately 2,000-square-foot concrete masonry unit (CMU) block wall building including the following water treatment facilities to provide the required secondary disinfectant conversion from one district's source water to the other: (1) a mechanical room with four vertical turbine pumps (two duty, one standby, and one jockey pump); (2) 500-gallon ammonia (40 percent liquid ammonium sulfate) storage tank and two ammonia feed pump skids housed in dedicated ammonia room; (3) 2,500-gallon, 12.5 percent sodium hypochlorite vertical storage tank with secondary chemical containment housed in a dedicated sodium hypochlorite room; (4) two sodium hypochlorite feed pump skids housed in dedicated sodium hypochlorite room; (5) electrical room with the pump variable frequency drives and electrical panels; and (6) an outdoor, 3,000-gallon surge tank. In addition, a temporary booster pump station consisting of a packaged pump system containing eight pumps would potentially be installed at the BPS-A site to provide pumping capacity while the BPS-A permanent structure is being constructed. The temporary booster pump station would only be implemented if water is available and would operate for up to a maximum of approximately three years or until the permanent pump station is constructed. The temporary booster pump station, if constructed, would be hauled onto the site on a skid roller and minimal ground disturbance would be required. The temporary booster pump station would tie directly into the electrical grid and no generator would be required. Minor ground disturbance would be required to tie the temporary booster pump station into the water piping. BPS-A would be located in unincorporated Ventura County adjacent to the pipeline alignment at the northwest intersection of Avocado Hill Road and an unpaved access road. The BPS-A building would be located within an approximately 20,900 square foot fenced area.

[2] HDD operations have a potential to release drilling fluids into the surface environment through frac-outs. A frac-out is the condition where drilling mud is released through fractured bedrock into the surrounding rock and sand and travels toward the surface. During the final design phase and upon close examination of geotechnical boring results and subsurface characteristics, the depth of the HDD is designed to achieve a minimum depth of cover to minimize the risk of a frac-out.

BPS-B would consist of an approximately 900 square-foot CMU block wall building housing three vertical turbine pumps (two duty and one standby pump) within a mechanical room. The building would also house the electrical room with the pump variable frequency drives and electrical panels. BPS-B would be located on a 7,500-square foot, previously disturbed site in unincorporated Ventura County, approximately 740 feet south of SR 150 and 0.6 mile west of the intersection of SR 150 and Red Mountain Fire Road. Development of BPS-B would include an access road extension totaling approximately 1,400 square feet.

Each booster pump station would include an outdoor transformer and a meter/main switchboard. Construction of the booster pump stations would include: site grading; underground and aboveground piping; concrete pads for pumps, piping, and electrical equipment; electrical service from Southern California Edison; installation of pumps, motors, and electrical equipment; minor site improvements such as fencing and awnings over equipment; and start-up and testing. Typical construction equipment would include an excavator, grader, crane, and standard work trucks. Construction supplies and equipment would be staged at each pump station site.

Improvements to Existing Casitas Infrastructure

The proposed project would require miscellaneous infrastructure improvements at a number of existing Casitas facilities:

- Rincon Main Pipeline
- Rincon Control Reservoir
- Rincon Vents
- Chlorination Station
- Rincon Pump Plant

RINCON MAIN PIPELINE

The proposed project would replace approximately 530 LF of existing Rincon Main Pipeline and would implement minor surge protection improvements at several existing air-relief valve locations along the existing Rincon Main Pipeline.

RINCON CONTROL RESERVOIR

The Rincon Control Reservoir is an existing 250,000-gallon welded steel tank facility located between the proposed BPS-A and BPS-B along the Rincon Main Pipeline. Currently, the facility accommodates water flows from the Casitas system towards the CVWD system. The proposed project would modify the existing facility to allow for water flow in the reverse direction. Improvements would include new bypass piping and valve configuration, as well as electrical and communication system modifications.

CHLORINATION STATION

The existing Chlorination Station is currently out of operation. The facility is located adjacent to an 18-inch shepherds hook vent. The project would replace the existing vent at the Chlorination Station site with a new equivalent combination air release valve to accommodate the proposed project. The project would not result in operation of the Chlorination Station.

RINCON VENTS

The Rincon Vents are existing vent structures for the Rincon Main Pipeline, located along the southern side of SR 150, approximately 4,940 feet west of Lake Casitas. To accommodate the proposed project, minor electrical and mechanical improvements would be conducted. Two options for mechanical improvements are under consideration: (1) the existing vent structures would be replaced with combination air release valves or taller standpipe vents, or (2) a new level-indicating transmitter would be added to the existing vent structure stilling well and the northern vent would be raised by 10 feet.

RINCON PUMP PLANT

The Rincon Pump Plant is an existing pump facility located southeast of Lake Casitas and east of the Lake Casitas Dam. The proposed project would include installation of a new pressure sustaining and reducing valve, a check valve, isolation valves, and approximately 130 LF of 18-inch bypass pipeline at the Rincon Pump Plant.

Construction Schedule

Project construction would likely be phased and would be implemented between Summer 2023 and Spring 2025. Project construction activities would generally occur during normal Casitas working hours, from 7:00 a.m. to 4:00 p.m. Monday through Friday, excluding holidays observed by Casitas. Pipeline construction along SR 192 is subject to an encroachment permit from Caltrans, which may limit construction activities to: (1) 9:00 a.m. to 3:00 p.m. or (2) nighttime hours. Trenchless HDD construction work hours would take place from 7:00 a.m. to 7:00 p.m., with exception of a 48-hour period of continuous work to complete the HDD pull through operation. Casitas intends to conduct construction activities during the day; however, if an emergency situation requires construction beyond 3:00 p.m., nighttime construction may be required.

For open cut pipeline construction and construction of the HDD exit pit, contractor employees would likely park at the nearest turnout in the construction zone. For construction of the booster pump stations and HDD entry pit, contractor employees would park on site. Approximately 10 two-way worker trips would occur per workday.

Pipeline construction would progress at the rate of approximately 200 to 300 LF of pipeline per day. Full public roadway closures are likely not necessary, as the trench would be limited to one lane of the roadways. Full roadway closures along smaller, private roads or access easements may be utilized but would be dependent on conditions negotiated in right-of-entry or permanent easement agreements with individual landowners. Workspace, traffic control, and work duration within Caltrans right-of-way would be dependent on individual permit restrictions which would be determined during final design. Traffic control with flag-persons would likely be set up to allow vehicular travel within one lane during pipeline construction.

Operation and Maintenance

BPS-A would be equipped with three 500-horsepower (HP) pumps, two operational pumps and one pump on standby, as well as one 15-HP jockey pump. BPS-B would be equipped with three 150-HP pumps, two operational pumps and one pump on standby. BPS-A and BPS-B pumps would operate as needed. For the purpose of this Initial Study, it is conservatively estimated the booster pump stations would be used for approximately 680 hours per year on average. Under these conditions, the booster pump stations would require approximately 662,200 kilowatt-hours (kWh) of electricity

annually. In addition, the water treatment equipment at BPS-A would require approximately 2,200 kWh of electricity annually under the same conditions.

Following completion of construction, maintenance of the project facilities would include remote monitoring via Casitas' supervisory control and data acquisition (SCADA) system, meter reading, routine inspections and maintenance of facilities, periodic testing, and emergency repairs. Trash and weeds would be regularly removed from the vicinity of aboveground facilities. Maintenance activities would occur monthly and on an as-needed basis, and approximately 50 vehicle trips by maintenance staff per year would occur. Regular and routine maintenance activities would not include any ground-disturbing activities.

9. Surrounding Land Uses and Setting

Land uses in and around the project area are predominantly agricultural with some undisturbed, open space areas. The pipeline alignment primarily traverses public roads and agricultural use areas.

10. Other Public Agencies Whose Approval is Required

Casitas is the lead agency under the California Environmental Quality Act (CEQA) with responsibility for approving the project. CVWD is a responsible agency with discretionary approval over the project. Table 1 lists the other approvals potentially required for the project.

Table 1 Summary of Potentially Required Approvals

Regulating Agency	Potential Permit/Approval	Reason for Permit/Approval
State Water Resources Control Board, Los Angeles Regional Water Quality Control Board, Central Coast Regional Quality Control Board	National Pollutant Discharge Elimination System (NPDES) Stormwater Construction General Permit, NPDES General Permit for Discharges of Groundwater from Construction, Clean Water Act Section 401 Water Quality Certification	Construction activities resulting in ground disturbance exceeding one acre, discharge of groundwater encountered during construction
Caltrans	Encroachment Permit	Pipeline construction within Caltrans rights-of-way
County of Ventura	Coastal Development Permit, Discretionary Tree Permit	Project implementation in Coastal Zone; project may impact protected trees
County of Santa Barbara	Coastal Development Permit	Project implementation in Coastal Zone; project may impact protected trees
U.S. Army of Corps of Engineers	Clean Water Act Section 404 Permit	Potential disturbance of jurisdictional wetlands/waters
U.S. Bureau of Reclamation	SF299 Application for Transportation, Utility Systems, Telecommunications, and Facilities on Federal Lands and Property	Modifications to Rincon Main Pipeline
California Department of Fish and Wildlife	Streambed Alteration Agreement	Potential disturbance of riparian habitat

11. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

On June 22, 2019, Casitas distributed Assembly Bill (AB) 52 consultation letters for the proposed project, including project information, map, and contact information, to the Native American tribes which requested AB 52 consultation for projects requiring CEQA clearance from Casitas, as well as CVWD. Under AB 52, Native American tribes have 30 days to respond and request further project information and request formal consultation. No response was received from the tribes.

Since the time of initial AB 52 consultation, the project description has been revised to include a selected route for the intertie pipeline, new locations for BPS-A and BPS-B, and additional improvements at existing Casitas facilities. In response to those revisions, Casitas distributed updated AB 52 consultation letters on September 1, 2022, which included project information, map and contact information to three Native American tribes for the purposes of CEQA. On September 8, 2022, CVWD distributed updated AB 52 consultation letters to seven Native American tribes for the purposes of CEQA.

Requests for additional information regarding the project were received from the Barbareño/Ventureño Band of Mission Indians tribe and Barbareño Band of Chumash Indians. No requests for formal tribal consultation were received. Accordingly, AB 52 consultation is complete for the project.

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Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact which is "Potentially Significant" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

☐	Aesthetics	☐	Agriculture and Forestry Resources	■	Air Quality
■	Biological Resources	■	Cultural Resources	☐	Energy
■	Geology and Soils	☐	Greenhouse Gas Emissions	■	Hazards and Hazardous Materials
■	Hydrology and Water Quality	☐	Land Use and Planning	☐	Mineral Resources
■	Noise	☐	Population and Housing	☐	Public Services
☐	Recreation	■	Transportation	☐	Tribal Cultural Resources
☐	Utilities and Service Systems	■	Wildfire	■	Mandatory Findings of Significance

Determination

Based on this initial evaluation:

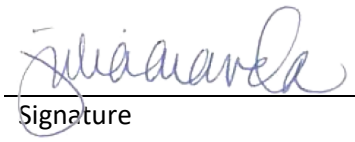
☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

■ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "less than significant with mitigation incorporated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

November 28, 2022

Date

Julia Aranda

Printed Name

Engineering Manager

Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	■	☐
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	■
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	■	☐
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	■	☐

a. Would the project have a substantial adverse effect on a scenic vista?

The project site is surrounded by agricultural lands which include some residences in unincorporated Ventura and Santa Barbara counties. The following photographs are representative of existing site conditions in the vicinity of the project site.

Photograph 1. Casitas Pass Road where the western portion of pipeline is proposed; view facing east.

Photograph 2. Casitas Pass Road where the western portion of pipeline is proposed; view facing west.

Photograph 3. Overview of Rincon Creek where HDD activities are proposed; view facing southeast.

Photograph 4. View of Rincon Road crossing over Rincon Creek; facing southwest.

Photograph 5. View of Rincon pipeline tie-in location neighbored by agricultural land; facing southwest.

Photograph 6. Back view of the Rincon Pumping Plant and Coyote Creek to the right; facing west.

Photograph 7. View of the Rincon Vent Station; facing west.

According to the Background Report for the Ventura County 2040 General Plan (2020a), the nearest designated Scenic Resource Area is Lake Casitas. Two infrastructure improvements, Rincon Vents and Rincon Pump Plant, are located in the Lake Casitas Scenic Resource Area. The proposed modifications in these areas primarily consist of underground components, such as bypass piping systems. Any necessary aboveground facilities proposed for the Rincon Vents and/or Rincon Pump Plant would be limited to minor infrastructure such as air-relief valves, which would be aesthetically consistent with the existing aboveground infrastructure on site. Therefore, impacts to scenic vistas in Ventura County would be less than significant.

The Santa Barbara County General Plan does not specifically designate scenic vistas. The project site is not located in an area identified as a Santa Barbara County scenic buffer area. Therefore, no impact to scenic vistas in Santa Barbara County would occur as a result of the project. Overall, impacts to scenic vistas would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

According to the Santa Barbara County Comprehensive Plan, SR 150 is a State Masterplanned Scenic Highway which is eligible for designation as a scenic highway (County of Santa Barbara 2017). In addition, although not officially designated as a State Scenic Highway, Caltrans has identified SR 150 as an Eligible State Scenic Highway (Caltrans 2019a, 2019b). The proposed project would include an underground water pipeline traversing underneath SR 150. As the pipelines would be belowground,

they would not interfere with views from SR 150. In addition, the project includes two booster pump stations. BPS-A would be located approximately 732 feet southeast of SR 150 and BPS-B would be located approximately 700 feet south of SR 150. The booster pump stations would be approximately 420 square feet in area and 10 feet in height. Security fencing would also be installed around the pump stations. The awnings, structure, and fencing for the booster pump stations would be designed to include neutral earth-tone or green (similar to nearby vegetation) colors and/or landscaping to minimize the potential for adverse changes to the existing visual character and quality of the project area. The booster pump stations would not be visible from SR 150 due to the distance from SR 150, the low height of the booster pump stations, and intervening vegetation and landforms. Therefore, there would be no impact to scenic resources within a state scenic highway.

NO IMPACT

c. *Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

The project site is located in a non-urbanized area. The project would consist of underground pipelines, two aboveground booster pump stations, and modifications to existing water infrastructure facilities. Short-term visual impacts would occur due to trenching, stockpiling, and other construction-related activities during installation of the proposed pipeline. However, the pipeline alignment would be restored to its current condition following the construction period. The underground pipelines would not be visible once construction is complete and would therefore not degrade the visual character of the project site. The proposed infrastructure modifications would involve subgrade modifications, which would also not visually degrade existing infrastructure. Any necessary aboveground facilities proposed in Infrastructure Improvement Areas 1 and 2 would be limited to minor infrastructure such as air-relief valves, which would be aesthetically consistent with the existing aboveground infrastructure on site.

The proposed project would construct two booster pump stations. The pump stations would be visible from the public roadways. The pumps at each booster pump station would be covered with an awning and the electrical equipment would be housed in a weatherproof structure, approximately 420 square feet in area and 10 feet in height. Security fencing would also be installed around the pump stations. The awnings, structure, and fencing for the booster pump stations would be designed to include neutral earth-tone or green (similar to nearby vegetation) colors and/or landscaping to minimize the potential for adverse changes to the existing visual character and quality of the project area. Additionally, due to intervening topography and vegetation currently present along SR 150 in the vicinities of the booster pump station sites and the posted speed limit of 55 miles per hour along SR 150, the pump stations would be visible to drivers and passengers of vehicles traveling along SR 150 in the project area for brief periods (a few seconds), thereby resulting in minimal impacts to visual character and quality from public viewpoints. Therefore, impacts to visual character and quality would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

Project construction would occur mainly during daylight hours, except for a 48-hour period during which HDD construction would occur continuously. During nighttime construction hours, artificial lighting may be used for illuminating workspaces and providing safety lighting. However, lights would be shielded and directed downwards onto the work area. Based on the extremely short-term duration associated with such potential conditions (i.e., HDD construction) and the use of appropriate shielding, construction-related lighting effects would be nominal.

Following construction, the proposed underground pipelines would not introduce a new source of light or glare. The proposed pump stations could include artificial lighting for nighttime security purposes. However, the lights would be shielded, directed downwards onto the buildings, and at a low wattage to minimize the potential of the lights from adversely affecting nighttime views in the project area. Nighttime lighting impacts during project operation would be less than significant.

Construction and operation of the proposed project would not result in a new source of glare. Therefore, no impact associated with glare would occur.

LESS THAN SIGNIFICANT IMPACT

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2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	■	☐
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	■	☐
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	■
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	■
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	■

a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The proposed project would involve construction and operation of an underground water pipeline, two booster pump stations, and underground infrastructure improvements at existing Casitas facilities. The pipeline alignment and BPS-A site contain lands designated as Farmland of Statewide Importance. Figure 5 provides an overview of mapped Farmland for all locations of the proposed project, and Figure 6 shows mapped Farmland in and near the pipeline alignment and BPS-A site.

Figure 5 Mapped Farmland – Project Overview

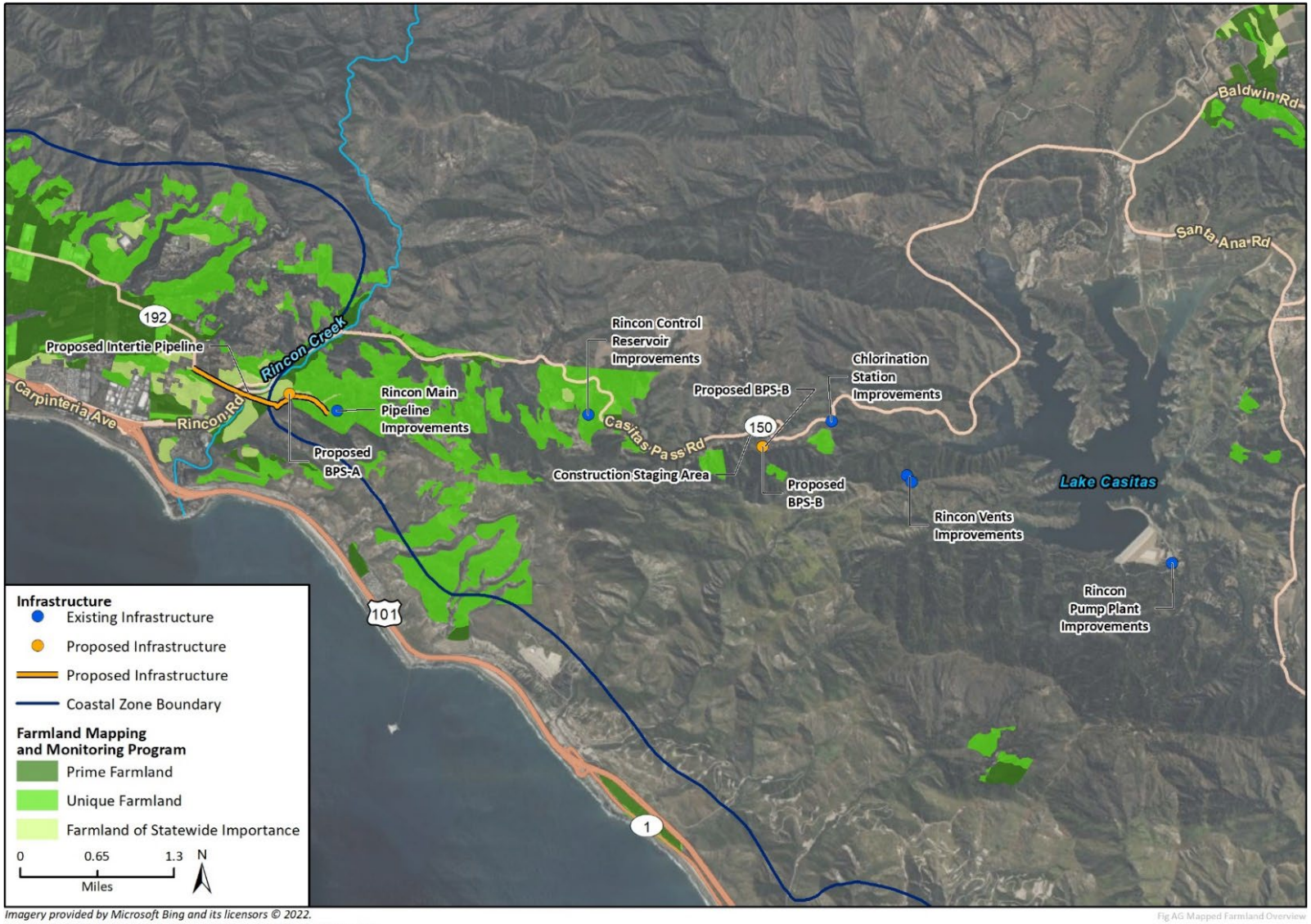
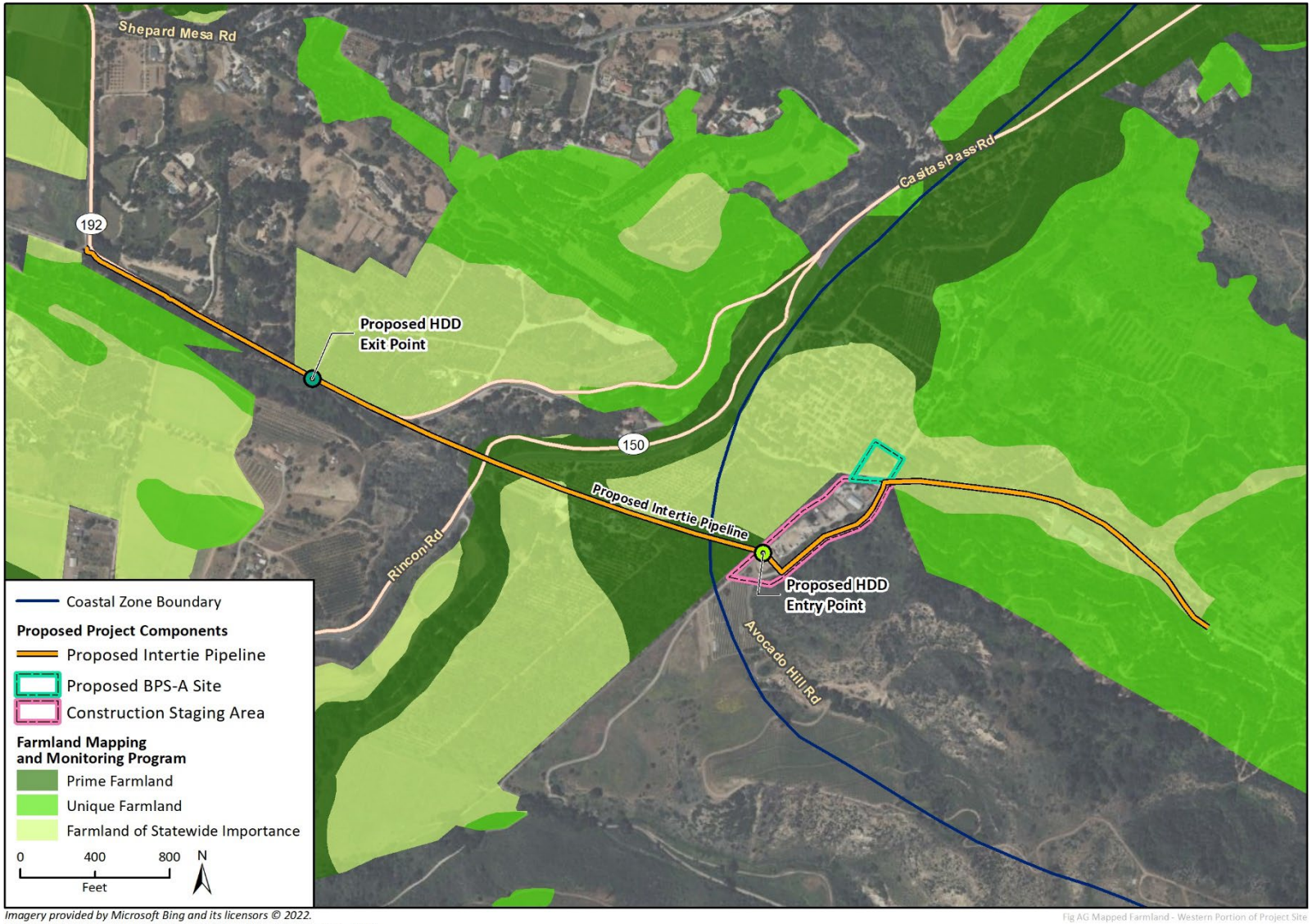


Figure 6 Mapped Farmland – Pipeline Alignment Options and Booster Pump Station A Site Options



Imagery provided by Microsoft Bing and its licensors © 2022.
Additional data provided by California Department of Conservation, 2016.

Fig AG Mapped Farmland - Western Portion of Project Site

Casitas does not have identified thresholds for the conversion of agricultural land. This analysis therefore relies on the County of Ventura's Initial Study Assessment Guidelines (2011) thresholds for agricultural impacts, as the agricultural lands potentially affected by the proposed project are located in unincorporated Ventura County. According to the Initial Study Assessment Guidelines, a project which would result in the conversion of five acres of Farmland of Statewide Importance would result in a significant impact (County of Ventura 2011).

The proposed pipeline would primarily be constructed underneath existing roadways, Caltrans rights-of-way, and previously disturbed, graded areas which are not currently in agricultural production. No conversion of agricultural land would occur. BPS-B site would not result in the conversion of land currently used for agriculture into non-agricultural use, as the BPS-B site is classified as grazing lands (California Department of Conservation [DOC] 2018). Infrastructure improvements at existing Casitas facilities would not result in land use changes, and would therefore not convert agricultural lands to non-agricultural use.

The construction of BPS-A would result in the conversion of approximately 25,800 square feet (0.6 acre) of Farmland of Statewide Importance. The total Farmland disturbed would not exceed the five-acre threshold identified by the County of Ventura as a significant impact. Furthermore, while the project would result in a small conversion of Farmland, the project would not preclude agricultural use near the vicinity of the project site. Once complete, the project would serve to assist Casitas in providing reliable water supplies to meet the needs of its customers, including for agricultural operations.

As such, the project would not substantially convert mapped Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?

The project site includes areas in Ventura and Santa Barbara counties which are currently zoned for agricultural use. Pursuant to California Government Code 53091, local zoning ordinances do not apply to the location or construction of facilities for the production, generation, storage, treatment, or transmission of water. The following paragraphs discuss local zoning ordinances for informational purposes.

According to the Ventura County Coastal Zoning Ordinance (Division 8, Chapter 1.1), public works facilities are allowed on land zoned as Coastal Agriculture (CA). The Ventura County Coastal Zoning Ordinance states the purpose of the Coastal Agriculture (CA) zone is "to preserve and protect commercial agricultural lands… from the encroachment of nonresidential uses that, by their nature would have detrimental effects on the agriculture industry" (County of Ventura 2017a). The proposed project would not be utilized to increase the amount of water currently being supplied to existing customers or to provide water to areas currently not serviced by Casitas or CVMD. The project objectives include improving regional water supply reliability in Ventura and Santa Barbara counties in areas susceptible to natural disasters such as wildfires, landslides, and earthquakes, including water supply reliability within Casitas' and CVWD's service area. Therefore, the proposed project is considered a consistent use in land zoned as Coastal Agriculture (CA).

According to the Ventura County Non-Coastal Zoning Ordinance (Division 8, Chapter 1), "efficient municipal services and facilities" are "promoted" on land zoned as Agriculture Exclusive (AE) and

Open Space (OS) to confine urban development. In addition, the Ventura County Non-Coastal Zoning Ordinance allows for public health and safety improvements within Agriculture Exclusive (AE) and Open Space (OS) zones, specifically for the purpose of managing and regulating hazardous or special conditions, including high fire risk areas. Because the project objectives include improving regional water supply reliability in Ventura and Santa Barbara counties in areas susceptible to natural disasters such as wildfires, landslides, and earthquakes, the proposed project is considered a consistent use in land zoned as Agriculture Exclusive (AE) and Open Space (OS) in Ventura County (County of Ventura 2019a).

In Santa Barbara County, water supply facilities are allowed in agricultural zones (including AG-I-5 and AG-I-10) in non-coastal areas (Santa Barbara County Code, Article 35.21.040; County of Santa Barbara 2019a). The County of Santa Barbara also allows for water supply facilities, including distribution pipelines and pump stations, within the coastal zone (County of Santa Barbara 2019b).

Many parcels within the vicinity of the project site are contracted under the Williamson Act. As previously discussed in item (a), the proposed project would not result in the permanent conversion of mapped Farmland into non-agricultural uses. Although portions of the proposed pipeline and BPS-A would result in direct impacts to mapped Farmland, such impacts would be minimized to the maximum extent practicable and removed orchard trees would be replaced after pipeline installation. Therefore, the proposed project would not conflict with a Williamson Act contract.

In summary, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

The project site and vicinity are not designated or zoned for forest land, timberland, or timberland zoned Timberland Production. Therefore, implementation of the proposed project would not convert any forest land to non-forest use, nor would it conflict with existing zoning for such lands. No impact to forest land would occur.

NO IMPACT

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

The proposed project would allow Casitas and CVWD to transfer available potable water supplies, as necessary, and improve the resiliency of the local water distribution network. The proposed infrastructure would not increase the amount of water currently being supplied to existing customers or provide water to areas currently not serviced by Casitas or CVMD, and would provide resiliency for water supplies. The post-construction condition of the project site would be similar to what currently exists. Therefore, the proposed project would not introduce new elements into the project area contributing to future conversion of agricultural use to non-agricultural use or forest land to non-forest use. No impact would occur.

NO IMPACT

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3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	■
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	■	☐	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	■	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	■	☐

The project site is located in the South Central Coast Air Basin (Basin), which extends across San Luis Obispo, Santa Barbara, and Ventura counties. The Ventura County Air Pollution Control District (VCAPCD) monitors and regulates the local air quality in Ventura County and the Santa Barbara County Air Pollution Control District (SBCAPCD) monitors and regulates local air quality in Santa Barbara County.

Air quality is affected by stationary sources (e.g., industrial uses and oil and gas operations) and mobile sources (e.g., motor vehicles). Air quality at a given location is a function of several factors, including the quantity and type of pollutants emitted locally and regionally, and the dispersion rates of pollutants in the region. Primary factors affecting pollutant dispersion are wind speed and direction, atmospheric stability, temperature, the presence or absence of inversions, and topography. The project site is located in the southeastern portion of the Basin, which has moderate variability in temperatures, tempered by coastal processes. The air quality within the Basin is influenced by a wide range of emission sources, such as dense population centers, heavy vehicular traffic, industrial uses, and weather.

Air Quality Standards and Attainment

The VCAPCD and SBCAPCD are required to monitor air pollutant levels to ensure National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are met. If the standards are met, the Basin is classified as being in "attainment." If the standards are not met, the Basin is classified as being in "nonattainment" and the affected air pollution control districts are required to develop strategies to meet the standards. According to the California Air Resources Board (CARB) Area Designation Maps, the project site is located in a region identified as being in nonattainment (Ventura County portion) and nonattainment-transitional (Santa Barbara County portion) for the ozone NAAQS and CAAQS. In addition, both Ventura and Santa Barbara counties are

designated nonattainment for the particulate matter 10 microns or less in diameter (PM_{10}) CAAQS (CARB 2017a, 2018a).

The VCAPCD adopted the 2016 Ventura County Air Quality Management Plan, which provides a strategy for the attainment of federal ozone standards (VCAPCD 2017). The SBCAPCD adopted the 2019 Ozone Plan, which builds upon prior Clean Air Act Plans focused on reducing ozone precursor emissions to achieve State and federal ozone standards (SBCAPCD 2019).

San Joaquin Valley Fever (formally known as coccidioidomycosis, hereafter referred to as "Valley Fever") is an infectious disease caused by a fungus which grows in the soil and dirt in some areas of California. Airborne fungal spores can infect the lungs of people and animals, causing respiratory symptoms, including cough and fever. Fungal spores can be made airborne when dry, dusty soil or dirt is disturbed by natural processes, such as wind or earthquakes, or by human-induced ground-disturbing activities, such as construction, farming, or other activities. In 2020, Valley Fever prevalence rates were 63 and 265 cases per 100,000 people in Ventura and Santa Barbara counties, respectively (California Department of Public Health 2020).

Air Emission Thresholds

Ventura County Air Pollution Control District

The VCAPCD's Ventura County Air Quality Assessment Guidelines (2003) recommend specific air criteria pollutant emission thresholds for determining whether a project may have a significant adverse impact on air quality within the Basin. VCAPCD does not have an established quantitative threshold for particulate matter for construction; however, VCAPCD recommends emission reduction measures as conditions of approval on discretionary permits or best management practices (BMP) if a project's emissions are above 25 pounds per day (lbs/day) for ozone precursors, which are composed of reactive organic compounds (ROC) and/or nitrogen oxides (NO_X). Therefore, the project's impact would be considered significant if the project's emissions exceed 25 lbs/day for ozone precursors.

The VCAPCD has not established quantitative thresholds for particulate matter for either operation or construction. The VCAPCD indicates a project generating fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or which may endanger the comfort, repose, health, or safety of any such person, or which may cause or have a natural tendency to cause injury or damage to business or property, would have a significant air quality impact. This threshold is applicable to the generation of fugitive dust during grading and excavation activities. The 2003 VCAPCD guidelines recommend fugitive dust mitigation measures be applied to all dust-generating activities. Such measures include minimizing a project's disturbance area, watering a site prior to commencement of ground-disturbing activities, covering all truck loads, and limiting on-site vehicle speeds to 15 miles per hour or less.

Santa Barbara County Air Pollution Control District

The SBCAPCD has not yet adopted quantitative significance criteria for temporary construction emissions associated with conventional land development projects. However, the SBCAPCD recommends quantification of construction-related emissions, and uses 25 tons per year for ROC or NO_X (ozone precursors) as a guideline for determining the significance of construction impacts for all types of projects.

According to the SBCAPCD (2021), a project would result in a significant air quality effect on the environment if operation of a project would:

- Emit (from all project sources, both stationary and mobile) more than 55 pounds per day for ROC and NO_X or more than 80 pounds per day for PM_{10} (there is no daily operational threshold for CO, as it is an attainment pollutant);
- Emit more than 25 pounds per day of NO_X or ROG from motor vehicle trips only;
- Cause or contribute to a violation of any CAAQS or NAAQS (except ozone);
- Exceed the SBCAPCD health risk public notification thresholds adopted by the SBCAPCD Board (10 excess cancer cases in one million for cancer risk and a Hazard Index of more than one for non-cancer risk); and/or
- Be inconsistent with the latest adopted federal and State air quality plans for Santa Barbara County.

Significance Thresholds for the Proposed Project

Because the project site is located in both the VCAPCD and SBCAPCD jurisdictions, this analysis conservatively applies both air districts' thresholds for each criteria pollutant. Table 2 summarizes the quantitative significance thresholds for the construction and operation of the proposed project.

Table 2 Construction and Operational Air Quality Thresholds of Significance for Proposed Project

Pollutant/Precursor	VCAPCD Construction Emission Thresholds (pounds per day)	SBCAPCD Construction Emission Thresholds (tons per year)	VCAPCD Operational Emission Thresholds (pounds per day)	SBCAPCD Operational Emission Thresholds (pounds per day)
ROC	25	25	25	240 (25 for mobile)
NO_X	25	25	25	240 (25 for mobile)
PM_{10}	N/A	N/A	N/A	80

ROC = reactive organic compounds; NO_X = nitrogen oxides; PM_{10} = particulate matter 10 microns or less in diameter; N/A = Not Available

Source: VCAPCD 2003; SBCAPCD 2021.

Applicable Rules and Regulations

Ventura County Air Pollution Control District

The VCAPCD implements rules and regulations for emissions generated by various uses and activities. The rules and regulations detail pollution-reduction measures to be implemented during construction and operation of projects. This section discusses the rules and regulations relevant to the project.

RULE 50 (OPACITY)

This rule sets opacity standards on the discharge from sources of air contaminants. This rule would apply during construction of the proposed project.

RULE 51 (NUISANCE)

This rule prohibits any person from discharging air contaminants or any other material from a source which would cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public or which endangers the comfort, health, safety, or repose to any considerable number of persons or the public. The rule would apply during construction and operational activities.

RULE 55 (FUGITIVE DUST)

This rule requires fugitive dust generators, including construction and demolition projects, to implement control measures limiting the amount of dust from vehicle track-out, earth moving, bulk material handling, and truck hauling activities. The rule would apply during construction and operational activities.

RULE 55.1 (PAVED ROADS AND PUBLIC UNPAVED ROADS)

This rule requires fugitive dust generators to begin the removal of visible roadway accumulation within 72 hours of any written notification from the VCAPCD. The use of blowers is expressly prohibited under any circumstances. This rule also requires controls to limit the amount of dust from any construction activity or any earthmoving activity on a public unpaved road. This rule would apply throughout all construction activities.

RULE 55.2 (STREET SWEEPING EQUIPMENT)

This rule requires the use of PM_{10} efficient street sweepers for routine street sweeping and for removing vehicle track-out pursuant to Rule 55. This rule would apply during all construction activities.

RULE 74.4 (CUTBACK ASPHALT)

This rule sets limits on the type of application and volatile organic compound (VOC) content of cutback and emulsified asphalt. The proposed project is required to comply with the type of application and VOC content standards set forth in this rule.

Santa Barbara County Air Pollution Control District

EQUIPMENT EXHAUST

The SBCAPCD requires the following measures for equipment exhaust (SBCAPCD 2017):

- All portable diesel-powered construction equipment shall be registered with the State's portable equipment registration program or shall obtain an APCD permit.
- Fleet owners of mobile construction equipment are subject to the California Air Resource Board (CARB) Regulation for In-Use Off-Road Diesel Vehicles (Title 13, California Code of Regulations [CCR], §2449), the purpose of which is to reduce NO_X, diesel particulate matter (DPM), and other criteria pollutant emissions from in-use off-road diesel-fueled vehicles. Off-road heavy-duty trucks shall comply with the State Off-Road Regulation.
- Fleet owners of mobile construction equipment are subject to the CARB Regulation for In-Use (On-Road) Heavy-Duty Diesel-Fueled Vehicles (Title 13, CCR, §2025), the purpose of which is to reduce DPM, NO_X, and other criteria pollutants from in-use (on-road) diesel-fueled vehicles. On-road heavy-duty trucks shall comply with the State On-Road Regulation.

- All commercial off-road and on-road diesel vehicles are subject, respectively, to Title 13, CCR, §2449(d)(3) and §2485, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to five minutes; electric auxiliary power units should be used whenever possible.

In addition, the SBCAPCD recommends the following measures (SBCAPCD 2017):

- Diesel equipment meeting the CARB Tier 3 or higher emission standards for off-road heavy-duty diesel engines should be used to the maximum extent feasible.
- On-road heavy-duty equipment with model year 2010 engines or newer should be used to the maximum extent feasible.
- Diesel powered equipment should be replaced by electric equipment whenever feasible.
- Equipment/vehicles using alternative fuels, such as compressed natural gas, liquefied natural gas, propane, or biodiesel, should be used on-site where feasible.
- Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
- All construction equipment shall be maintained in tune per the manufacturer's specifications.
- The engine size of construction equipment shall be the minimum practical size.
- The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure the smallest practical number is operating at any one time.
- Construction worker trips should be minimized by requiring carpooling and by providing for lunch on-site.

FUGITIVE DUST

The SBCAPCD requires the following dust control measures for all earthmoving activities (SBCAPCD 2017):

- During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 miles per hour. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.
- Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.
- If importation, exportation and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.
- Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.
- After clearing, grading, earth moving, or excavation is completed, treat the disturbed area by watering, revegetating, or spreading soil binders until the area is paved or otherwise developed so dust generation will not occur.
- The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust off-site. Their duties shall include holiday and weekend periods when work may not be in progress. The

name and telephone number of such persons shall be provided to the SBCAPCD prior to grading/building permit issuance and/or map clearance.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

A project may be inconsistent with the applicable air quality plan if the project would generate population, housing, or employment growth exceeding the forecasts used in the development of the plan. This analysis examines the proposed project's consistency with the VCAPCD's 2016 Ventura County AQMP and the SBCAPCD's 2019 Ozone Plan. The 2016 Ventura County AQMP relies on the Southern California Association of Governments' 2016 Regional Transportation Plan/Sustainable Communities Strategy forecasts of regional population growth in its projections for managing Ventura County's air quality (Southern California Association of Governments 2016). The SBCAPCD's 2019 Ozone Plan relies on population growth estimates from the Santa Barbara County Association of Governments' Regional Growth Forecast 2050 (Santa Barbara County Association of Governments 2019).

The proposed project would not include new housing or businesses, nor would construction or operation and maintenance of the proposed project require new employees which could result in population growth in Ventura or Santa Barbara County. likewise, the proposed project would not be utilized to increase the amount of water currently being supplied to existing customers or to provide water to areas currently not serviced by Casitas or CVMD. The project would not generate population, housing, or employment growth or result in exceedance of the Southern California Association of Governments' or Santa Barbara County Association of Governments' projected growth forecasts. Therefore, the project would not conflict with or obstruct implementation of the applicable air quality plans. No impact would occur.

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b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?

The proposed project would generate short-term emissions associated with project construction and long-term emissions associated with operation of the booster pump stations. Construction and operational emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0. CalEEMod was developed by BREEZE Software and is used by jurisdictions throughout the state to quantify criteria pollutant emissions.

Construction Emissions

The analysis relied upon the following assumptions:

Pipeline

- **Construction Method.** The approximately 7,100 LF pipeline would primarily be constructed via open-trench construction with five-foot-wide trenches. Pipeline construction using open-trench method would require the use of an excavator, wheeled loader, dump truck, and vibrating compactor. Trenchless HDD construction would be used to cross Rincon Creek, resulting in up to 2,000 LF of trenchless construction. The project would also replace approximately 530 LF of the existing Rincon Main Pipeline. For purposes of this analysis, it was conservatively assumed open-trench, HDD, and replacement pipeline construction would occur simultaneously.

- **Disturbance Area.** The open-trench, HDD, and replacement construction of the proposed pipelines would disturb a total of approximately 0.87 acre (38,100 square feet), with approximately 200 to 300 LF of pipeline constructed per day.
- **Fugitive Dust Control.** Measures pertaining to fugitive dust control, including watering exposed areas, reducing vehicle speeds to 15 miles per hour on unpaved roads, and cleaning/sweeping paved roads, were incorporated into the modeling of construction emissions. Other measures, such as those reducing emissions of ozone precursors, were not incorporated into the modeling of construction emissions, but would also further reduce construction emissions below those presented in this analysis.
- **Material Export and Import.** For open-trench construction, approximately 2,900 cubic yards of soil and pavement would be hauled away. The proposed open-trench construction would total approximately 4,400 LF of open-cut trenching (not including the segment of pipeline to be installed under Rincon Creek via trenchless crossing). Approximately 0.65 cubic yards of soil and/or pavement would be hauled off site for disposal (i.e., not used as trench backfill) per linear foot of pipeline installed (4,400 LF x 0.65 cubic yards per LF of open-cut trenching = 2,900 cubic yards of soil and/or pavement to be hauled off site). Additionally, approximately 500 cubic yards of soils would be removed for HDD construction, based on a 30-inch borehole. Therefore, the total soil removal for open cut trench excavation and HDD is approximately 4,000 cy.
- **Construction Haul and Worker Trips.** Approximately 2,900 cubic yards of soil would be exported off site. CalEEMod assumptions for truck hauling capacity (16 cubic yards of soil per load) was used, equating to approximately 287 haul truck trips to export excavated soil off site. Approximately five truck trips per day would occur for the delivery of construction materials. Therefore, approximately 77 delivery trips are assumed in the analysis. Additionally, approximately 10 two-way worker trips would occur per workday.
- **Construction Schedule and Phases.** Construction of the pipeline is assumed to occur between Summer 2023 and Spring 2025.
- **Pumps and Generators.** Continuous (24-hour) pumps and generators may be needed during trenchless excavation and trenchless pipeline installation. Well pump specifications were based on Model 2P5X 2-inch Engine Driven Portable High Pressure Pumps (approximately 5 HP class; AMT Pump Company 2012). Generator HP was based on Generac MLG8K Mobile Diesel Generator (approximately 13.5 HP; Generac Mobile Products LLC 2019).

Pump Stations and Improvements

- **Disturbance Area.** Construction of BPS-A and BPS-B would consist of one 2,000-square-foot and one 900-square-foot CMU block wall building, respectively. In addition, the ground disturbance for BPS-A would be approximately 25,800 square feet and approximately 8,900 square feet for BPS-B. While the extent of ground disturbance for other improvements to existing Casitas infrastructure is not currently known, it was assumed to be less than 10 percent of the proposed pipeline disturbance area. Therefore, for purposes of impact modeling, the ground disturbance for improvements were overlapped with BPS-B, for a total of 0.29 acre of disturbance area (12,710 square feet).
- **Construction Method.** Typical construction equipment would include an excavator, grader, crane, and standard work trucks.
- **Fugitive Dust Control.** Measures pertaining to fugitive dust control, including watering exposed areas, reducing vehicle speeds to 15 miles per hour on unpaved roads, and cleaning/sweeping paved roads, were incorporated into the modeling of construction emissions. Other measures,

such as those reducing emissions of ozone precursors, were not incorporated into the modeling of construction emissions, but would also further reduce construction emissions below those presented in this analysis.

- **Construction Schedule and Phases.** Construction of BPS-A and BPS-B is assumed to occur between Summer 2023 and Spring 2025, and it was conservatively assumed construction of BPS-A and BPS-B would occur simultaneously.

Project construction would generate temporary air pollutant emissions. These impacts are associated with fugitive dust and exhaust emissions from heavy-duty construction vehicles. The excavation phase of the project would involve the largest use of heavy equipment and generation of fugitive dust. As shown in Table 3, annual construction emissions would be below the SBCAPCD annual threshold for all years of construction. Therefore, construction activities for the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant pursuant to the SBCAPCD thresholds and guidance.

Table 3 Construction Air Pollutant Emissions (SBCAPCD Thresholds)

	SBCAPCD Annual Emissions (Tons/Year)					
Construction Year	**ROC**	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
2023	<1	3	3	<1	<1	<1
2024	<1	2	3	<1	<1	<1
2025	<1	<1	<1	<1	<1	<1
Maximum Annual Emissions	**<1**	**3**	**3**	**<1**	**<1**	**<1**
SBCAPCD Thresholds	25	25	–	–	–	–
Threshold Exceeded?	**No**	**No**	–	–	–	–

ROC = reactive organic compounds, NO_X = nitrogen oxides, CO = carbon monoxide, SO_2 = sulfur dioxide, PM_{10} = particulate matter 10 microns in diameter or less, $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

See Appendix A for modeling details and CalEEMod results.

Notes: Some totals may not add up correctly due to rounding. Emissions data is sourced from "mitigated" results, which incorporate emissions reductions from measures to be implemented during project construction, such as watering of soils during construction required under VCAPCD Rule 55.

However, as shown in Table 4, maximum daily emissions associated with the project from construction would exceed the VCAPCD-recommended threshold of 25 lbs/day for ozone precursors. Therefore, because NO_X emissions would exceed the 25 lbs/day threshold, air quality impacts would be potentially significant.

Table 4 Construction Air Pollutant Emissions (VCAPCD Thresholds)

	Maximum Daily Emissions (Pounds/Day)[1]					
	ROC	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Pipeline	5	39	49	<1	2	2
Temporary Booster Pump Station	1	7	6	<1	1	<1
Booster Pump Station A	3	28	24	<1	4	2
Booster Pump Station B & Rincon Main Improvements	3	28	24	<1	4	2
Maximum Daily Emissions	**11**	**102**	**103**	**<1**	**10**	**7**
VCAPCD Thresholds	25	25	–	–	–	–
Threshold Exceeded?	**No**	**Yes**				

VCAPCD = Ventura County Air Pollution Control District; ROC = reactive organic compounds; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

[1] This table provides a conservative analysis and presents the maximum daily emissions when the construction phases overlap. See Appendix A for modeling details and CalEEMod results.

Notes: Some totals may not add up due to rounding. Emissions data is sourced from "mitigated" results, which incorporate emissions reductions from measures to be implemented during project construction, such as watering of soils during construction required under VCAPCD Rule 55.

With respect to fugitive dust (PM_{10}) emissions, the VCAPCD Guidelines (2003) state significant construction-related air quality impacts would result if fugitive dust emissions are generated in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public. For construction impacts, the VCAPCD recommends minimizing fugitive dust through dust control measures.[3]

Fugitive dust control measures are required by VCAPCD Rule 55. Such measures include securing tarps over truck loads, removing vehicle track-out using PM_{10} efficient sweepers, and watering bulk material to minimize fugitive dust. As a result, compliance with VCAPCD Rule 55 would ensure construction emissions would not be generated in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or endanger the comfort, repose, health, or safety of any such person or the public. Compliance with VCAPCD Rule 55 would reduce potential impacts associated with PM_{10} to less than significant in the Ventura County portion of the project site.

Similarly, the SBCAPCD requires implementation of fugitive dust control measures and equipment exhaust measures, as previously described. Compliance with these requirements would reduce potential impacts associated with PM_{10} to less than significant in both Ventura and Santa Barbara counties.

[3] Measures pertaining to fugitive dust control, including watering exposed areas, reducing vehicle speeds to 15 miles per hour on unpaved roads, and cleaning/sweeping paved roads, were incorporated into the modeling of construction emissions as "mitigation." Other measures, such as those reducing emissions of ozone precursors, were not incorporated into the modeling of construction emissions, but would also further reduce construction emissions beyond those presented in this analysis.

Operational Emissions

Maintenance activities would occur monthly and on an as-needed basis, and approximately 50 vehicle trips by maintenance staff per year would occur. Regular and routine maintenance activities would not include any ground-disturbing activities. Annual maintenance vehicle trips would yield less than one ton per year of NO_X and ROG (Appendix A).

The pump stations would not generate substantial operational emissions because they would be connected to the regional electricity grid, which is increasingly powered by renewable energy. Existing stationary sources (e.g., power plants) are permitted by air districts and/or the United States Environmental Protection Agency, and are subject to local, State, and federal control measures. Emissions of criteria air pollutants generated at power plants are not attributed to individual projects or electricity users. Therefore, this analysis does not calculate indirect emissions of criteria pollutants from the operational electricity needs of the booster pump stations. The air quality impact associated with ozone precursors and PM_{10} during operation and maintenance of the project would be less than significant.

Mitigation Measures

Implementation of Mitigation Measure AQ-1 would reduce construction emissions of NO_X in accordance with VCAPCD guidance.

AQ-1 NO_X Construction Reduction Measures

Pursuant to VCAPCD Guidelines, when construction emissions exceed 25 pounds per day for NO_X, the following measures shall be implemented:

- Casitas shall ensure all on-site vehicles and equipment with 50 horsepower or more shall meet, at a minimum, United States Environmental Protection Agency (USEPA) Tier IV final engine certification requirements. If Tier IV final equipment is not available, the contractor may apply other technologies available for construction equipment which would achieve a reduction in NO_X (as well as PM) emissions comparable to Tier IV final construction equipment. Where alternatives to USEPA Tier IV are utilized, the contractor shall be required to provide evidence these alternative technologies would achieve comparable emissions reductions. Certifications or alternative reduction strategies shall be required prior to receiving a construction permit.
- Minimize equipment idling time.
- Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications.
- Lengthen the construction period during smog season (May through October) to minimize the number of vehicles and equipment operating at the same time.
- Use alternatively fueled construction equipment, such as compressed natural gas, liquefied natural gas, or electric, if feasible.

Significance After Mitigation

Implementation of Mitigation Measure AQ-1 would reduce construction emissions of NO_X in accordance with VCAPCD guidance. Project construction emissions with implementation of Mitigation Measure AQ-1 are shown in Table 5. As shown in the table, emissions of NO_X would be reduced below 25 lbs/day from the use of Tier IV final equipment as compared to no specified tier. Therefore, impacts would be less than significant after mitigation.

Table 5 Construction Air Pollutant Emissions – Mitigated

Project Component	Maximum Daily Emissions (Pounds/Day)[1]					
	ROC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Pipeline	1	6	57	<1	<1	<1
Temporary Booster Pump Station	<1	2	7	<1	<1	<1
Booster Pump Station A	1	3	31	<1	3	1
Booster Pump Station B & Rincon Main Improvements	1	3	31	<1	3	1
Maximum Daily Emissions	**3**	**13**	**126**	**<1**	**7**	**3**
VCAPCD Thresholds	25	25	–	–	–	–
Threshold Exceeded?	**No**	**No**				

VCAPCD = Ventura County Air Pollution Control District; ROC = reactive organic compounds; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

[1] This table provides a conservative analysis and presents the maximum daily emissions when the construction phases overlap. See Appendix A for modeling details and CalEEMod results.

Notes: Some totals may not add up due to rounding. Emissions data is sourced from "mitigated" results, which incorporate emissions reductions from measures to be implemented during project construction, such as watering of soils during construction required under VCAPCD Rule 55.

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c. Would the project expose sensitive receptors to substantial pollutant concentrations?

The VCAPCD defines sensitive receptors as facilities or land uses which include members of the population particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Sensitive receptors listed in the VCAPCD Guidelines include residences, schools, hospitals, and daycare centers (VCAPCD 2003). The SBCAPCD identifies schools, residences, daycares, and eldercare facilities as examples of sensitive receptors (SBCAPCD 2019). Potential sensitive receptors within 500 feet of the project site include several single-family residences. The nearest sensitive receptor to the proposed pipeline alignment is a residence approximately 35 feet west of Avocado Hill Road.

Both booster pump stations would be in Ventura County and within the jurisdiction of VCAPCD. The nearest sensitive receptor to the proposed Booster Pump Stations is a single-family residence located approximately 100 feet west of the BPS-A. For informational purposes, the nearest SBCAPCD-defined sensitive receptor within Santa Barbara County is a single-family residence located approximately 1,135 feet west of BPS-A.

As discussed under item (b) of this section, project construction would result in emissions of criteria pollutants, including PM_{10}, ROC, and NO_X. Such emissions would be temporary in nature and reduced through compliance with existing regulations, such as VCAPCD Rule 55 and SBCAPCD's measures relating to fugitive dust and equipment exhaust. Furthermore, construction emissions at a given sensitive receptor would occur for only a limited portion of the overall construction period.

Traffic-congested roadways and intersections have the potential to generate elevated localized carbon monoxide (CO) levels (i.e., CO hotspots). In general, CO hotspots occur in areas with poor circulation or areas with heavy traffic. CO levels in Ventura County have been historically low

enough the VCAPCD monitoring stations throughout the county ceased monitoring ambient CO concentrations in March and July 2004 (VCAPCD 2010). Due to the relatively low background ambient CO levels in Santa Barbara County, the SBCAPCD no longer requires CO hotspot analyses, even for development projects with concentrated and prolonged vehicle idling such as drive-through facilities. The SBCAPCD does not anticipate such project traffic would exceed the CO health-related air quality standards (SBCAPCD 2017).

Construction activities would cause a temporary increase in vehicle traffic. Because construction is a short-term activity and related impacts would move as work progresses along the pipeline corridor, construction-related traffic impacts with potential to cause temporary CO hotspots would not be substantial. Therefore, the project would not result in CO hotspots. Following completion of construction, maintenance activities would occur monthly and on an as-needed basis, and approximately 50 vehicle trips by maintenance staff per year would occur.

With implementation of emissions reduction measures required by the VCAPCD and SBCAPCD, the project would not expose sensitive receptors to substantial pollutant concentrations. This impact would be less than significant.

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d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The populations of Ventura and Santa Barbara counties have been and will continue to be exposed to Valley Fever from agricultural and construction activities occurring throughout the region. The fungal spores responsible for Valley Fever generally grow in virgin, undisturbed soil. Soils along the project alignment, pump stations, and proposed infrastructure improvements are already disturbed from construction of roadways, commercial structures, and residences, as well as activities associated with agricultural production. Due to the previous amount of disturbance on the project site, disturbance of soils during construction activities is unlikely to pose a substantial risk of infection of Valley Fever to people in the project area. Substantial increases in the number of reported cases of Valley Fever tend to occur only after major ground-disturbing events such as the 1994 Northridge earthquake (VCAPCD 2003). Furthermore, the standard construction measures listed above would reduce fugitive dust generation, which would further minimize the potential risk of infection. Therefore, construction of the proposed project would not substantially increase the risk to public health above existing background levels. Because the project area does not pose a substantial risk for Valley Fever, Valley Fever-specific mitigation measures detailed in the VCAPCD Guidelines would not be required. In addition, given the temporary nature of construction emissions, as well as incorporation of fugitive dust reduction measures through compliance with existing VCAPCD and SBCAPCD regulations, the potential impact associated with Valley Fever would be less than significant.

Project construction could generate odors associated with heavy-duty equipment operation and earth-moving activities. Such odors would be temporary in nature and limited to the duration of construction in the vicinity of a given receptor. The proposed pipeline would be installed below ground and would not create objectionable odors during project operation. Normal operation of the booster pump stations would not use equipment known to generate objectionable odors. Each proposed pump station would be equipped with an emergency diesel generator, which would only be operational on a short-term basis to provide power in the event traditional power is not available. Otherwise, the booster pump stations would not use equipment known to generate

objectionable odors. Use of emergency diesel generators, if necessary, would be short-term and temporary in nature. Therefore, this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	■	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	■	☐	☐
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	■	☐	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	■	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	■	☐	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	■

In June 2019, Rincon Consultants, Inc. conducted a Biological Resources Assessment, including a literature review and field reconnaissance survey to document existing site conditions and the potential presence of special-status biological resources, including plant and wildlife species, plant communities, jurisdictional waters and wetlands, and habitat for nesting birds. The biological reconnaissance survey encompassed the proposed project footprint (i.e., areas which are expected to be affected by the proposed project) and a 50-foot survey buffer beyond the limits of the project footprint (Biological Study Area [BSA]). In September 2022, Rincon Consultants, Inc. updated the project-specific Biological Resources Assessment to include the modified project design. The following summarizes the findings of the updated assessment. The complete revised Biological Resources Assessment is contained in Appendix B of this document. Eleven special status plant species were determined to have a low potential to occur within the BSA:

- Santa Barbara honeysuckle (*Lonicera subspicata* var*. subspicata*)
- Davidson's bush-mallow (*Malacothamnus davidsonii*)
- White-veined monardella (*Monardella hypoleuca* ssp*. hypoleuca*)
- Ojai navarretia (*Navarretia ojaiensis*)
- Nuttall's scrub oak (*Quercus dumosa*)
- Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*)
- Brewer's calandrinia (*Calandrinia breweri*)
- Catalina mariposa-lily (*Calochortus catalinae*)
- monkey-flower savory (*Clinopodium mimuloides*)
- Rattan's cryptantha (*Cryptantha rattanii*)
- south coast branching phacelia (*Phacelia ramosissima var. austrolitoralis*)

In addition, nine special status animal species were determined to have a low potential to occur within the BSA:

- California red-legged frog (*Rana draytonii*)
- western pond turtle (*Emys marmorata*)
- least Bell's vireo (*Vireo bellii pusillus*)
- southwestern willow flycatcher (*Empidonax traillii extimus*)
- Crotch bumblebee (*Bombus crotchii*)
- Monarch butterfly (*Danaus plexippus* pop. 1)
- coast range newt (*Taricha torosa*)
- two striped garter snake (*Thamnophis hammondii*)
- American badger (*Taxidea taxus*)

Three special status animal species were determined to have moderate to high potential to occur within the BSA:

- yellow warbler (*Setophaga petechia*)
- California legless lizard (*Anniella pulchra*)
- San Diego desert woodrat (*Neotoma lepida intermedia*)

Vegetation within and adjacent to the BSA provides potential nesting habitat for bird species protected under California Fish and Game Code 3503 and the federal Migratory Bird Treaty Act.

Four potentially jurisdictional hydrologic features are present within the BSA: Rincon Creek, Casitas Creek, Coyote Creek, and an unnamed drainage tributary to Casitas Creek. These four features are potentially subject to United States Army Corps of Engineers (USACE) jurisdiction pursuant to Section 404 of the Clean Water Act, Regional Water Quality Control Board (RWQCB) jurisdiction pursuant to Section 401 of the Clean Water Act and the California Water Code (Porter-Cologne Water Quality Control Act), and California Department of Fish and Wildlife (CDFW) pursuant to California Fish and Game Code 1600.

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

California legless lizard and San Diego desert woodrat have a moderate potential to occur within coast live oak woodlands and scrub habitats within the BSA. The yellow warbler has a high potential to occur within the riparian corridors within the BSA, including Rincon Creek, Casitas Creek, Coyote Creek, and the unnamed drainage. As a result, project activities could potentially directly or indirectly impact individuals of these species. However, these Species of Special Concern with potential to occur are not geographically restricted to the vicinity of the BSA, and injury/death to limited individuals would not contribute to a loss of population viability of these Species of Special Concern. Adherence to Measures BIO-1 and BIO-2 would reduce potential direct and indirect effects to these species to a less-than-significant level by delineating construction limits and training to identify special status species.

Additionally, the BSA contains habitat which can support protected nesting birds, including raptors, protected under the California Fish and Game Code (CFGC) and the Migratory Bird Treaty Act (MBTA). The native, non-native, and ornamental vegetation throughout the BSA provides suitable nesting habitat for avian species. Specifically, the mature coast live oak, California sycamore, and eucalyptus trees throughout the BSA contain suitable habitat for raptor species while the various shrub layers provide suitable habitat for passerine species. Potentially significant direct impacts to raptors and other nesting birds may result if construction occurs while they are present within or adjacent to the project footprint, through direct mortality or abandonment of nests. The loss of a nest due to construction activities would be a violation of the MBTA and CFGC Section 3503.

Eleven special status plant species have a low potential to occur within the BSA and none were observed during the biological reconnaissance surveys conducted July 14, 2022. The species with low potential to occur are associated with the coast live oak woodland, foothill grassland, coastal scrub, and riparian corridors throughout the BSA. Given the minimal size of the impact area, surrounding agricultural and developed land cover, and the low potential for occurrence, potential impacts would not likely reduce the populations of the identified special status plant species below self-sustaining levels. Therefore, potential impacts to Santa Barbara honeysuckle, Davidson's bush-mallow, White-veined monardella, Ojai navarretia, Nuttall's scrub oak, Sonoran maiden fern, Brewer's calandrinia, Catalina mariposa-lily, monkey-flower savory, Rattan's cryptantha, and south coast branching phacelia would be less than significant.

No special status wildlife species were observed or detected during the biological reconnaissance surveys. Twelve special status wildlife species were determined to have low potential to occur

within the BSA based upon known ranges, habitat preferences for the species, and species occurrence records from the California Natural Diversity Database (CNDDB).

Crotch bumblebee, California monarch, California red-legged frog, coast range newt, western pond turtle, two striped garter snake, southwestern willow flycatcher, least Bell's vireo, and American badger have a low potential to occur within the BSA. The BSA lacks essential habitat elements needed to support the species. Therefore, these species are not expected to be impacted by the project.

Mitigation Measures

Implementation of the following mitigation measures during project construction would reduce the potential impact to special status animal species and nesting birds to a less-than-significant level.

BIO-1 Worker Environmental Awareness Program

Prior to initiation of all construction activities (including staging and mobilization), all personnel associated with project construction shall attend a Worker Environmental Awareness Program (WEAP) training conducted by a qualified biologist to assist workers in recognizing special status biological resources which may occur in the BSA. The training shall include information about nesting birds and the special status species potentially occurring in the BSA.

The specifics of this program shall include identification of special status species and habitats, a description of the regulatory status and general ecological characteristics of special status resources, and review of the limits of construction and measures required to avoid and minimize impacts to biological resources within the work area. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employees, and other personnel involved with construction of the project. All employees shall sign a form provided by the trainer documenting they have attended the WEAP and understand the information presented to them. The crew foreperson shall be responsible for ensuring crew members adhere to the guidelines and restrictions designed to avoid impacts to special status species. If new construction personnel are added to the project, the crew foreman shall confirm new personnel receive the WEAP training before starting work. The subsequent training of personnel can include video of the initial training and/or the use of written materials rather than in-person training by a biologist.

BIO-2 Wildlife Avoidance During Construction

The following measures shall be adhered to during project construction:

- The contractor shall clearly delineate the construction limits and prohibit any construction-related traffic outside those boundaries.
- Project-related vehicles shall observe a 10-mile-per-hour speed limit within the unpaved limits of construction.
- All open trenches or excavations shall be fenced and/or sloped to prevent entrapment of wildlife species.
- All food-related trash shall be disposed of in closed containers and removed from the project site at the end of each day. Construction personnel shall not feed or otherwise attract wildlife to the construction area.
- At project completion, all project-generated debris, vehicles, building materials, and rubbish shall be removed from the project site.

- No construction worker pets shall be allowed on the project site.
- No firearms shall be allowed on the project site.
- If vehicle or equipment maintenance is necessary, it shall be performed in designated staging areas.
- If construction must occur at night (between dusk and dawn), all lighting shall be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties and to reduce impacts on local wildlife.
- During construction, heavy equipment shall be operated in accordance with standard construction BMPs. All equipment used on site shall be properly maintained to avoid leaks of oil, fuel, or residues. Provisions shall be in place to remediate any accidental spills immediately.

BIO-3 Preconstruction Nesting Bird Surveys

To avoid disturbance of nesting and special status birds, including raptor species, protected by the MBTA and CFGC, activities related to the project including, but not limited to, vegetation removal, ground disturbance, and construction and demolition shall occur outside the bird breeding season for migratory birds (January 1 through September 15), if practicable.

If construction must begin during the breeding season, a preconstruction nesting bird survey shall be conducted no more than three days prior to initiation of ground disturbance and/or vegetation removal activities. The preconstruction nesting bird survey shall be conducted on foot within the project footprint plus a 300-foot buffer. Inaccessible areas (e.g., private lands) shall be surveyed from afar using binoculars to the extent practicable. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California coastal communities. If active nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed breeding/nesting is completed and the young have fledged the nest, or the nest has failed. Encroachment into the buffer shall occur only at the discretion of the qualified biologist.

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b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

California sycamore woodland is found within the footprint of the proposed BPS-B site and its associated construction staging area. Up to 2.34 acres of this sensitive vegetation community could be directly impacted by removal or degradation by project construction. Impacts to California sycamore woodland would be significant without mitigation; however, by avoiding unanticipated impacts to the habitat with the use of temporary fencing throughout the duration of construction, implementation of Measures BIO-4 and BIO-5 would minimize impacts and compensate for impacts to sensitive plant communities.

HDD and/or construction materials (e.g., stockpiled materials, construction equipment, and trash) have the potential to result in potentially significant indirect impacts to native riparian communities through disturbance of vegetation and erosion. Mitigation Measures BIO-1 and BIO-6 are provided

which require construction personnel to attend a worker environmental awareness program and erect temporary construction fencing at the edge of the temporary construction easement. With implementation of Mitigation Measures BIO-1 and BIO-6, potential indirect impacts to sensitive plant communities would be reduced to a less-than significant level.

Therefore, the project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service. This impact would be less than significant with mitigation incorporated.

Mitigation Measures

Implementation of the following mitigation measures during project construction would reduce the potential impacts to sensitive habitat to a less-than-significant level.

BIO-4 Sensitive Habitat Fencing

Prior to project mobilization where the project is adjacent to sensitive natural communities, temporary construction fencing shall be erected by the contractor at the edge of the temporary construction easement to avoid unanticipated impacts to the habitat throughout the duration of construction.

BIO-5 Sensitive Vegetation Community Compensation

Impacts to sensitive vegetation communities shall be avoided to the greatest extent feasible. Depending on final project design, sensitive vegetation community compensation mitigation may be required by CDFW. Mitigation for unavoidable impacts to sensitive vegetation communities can be accomplished either through on-site restoration, off-site restoration, or purchase of credits through an approved Mitigation Bank or through applicant sponsored mitigation (e.g., purchase and/or dedication of land for mitigation). If required, compensatory mitigation for unavoidable impacts to sensitive vegetation communities shall be accomplished at a minimum ratio of 1:1; however, the final ratio shall be determined and approved by CDFW prior to commencement of construction. If on- or off-site restoration would occur, a Restoration Plan shall be prepared and submitted for approval by CDFW prior to initiating impacts. At minimum, the Restoration Plan shall include the following:

- A description of the purpose and goals of the restoration
- Identification of success criteria and performance standards
- Methods of site preparation
- Irrigation plan and schedule
- BMPs
- Maintenance and monitoring program
- Adaptive management strategies
- Key stakeholders and responsible parties
- Funding
- Contingencies

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Impacts to Coyote Creek are not anticipated based on the project footprint. Casitas Creek and the unnamed drainage tributary to Casitas Creek could potentially be impacted by construction of the proposed BPS-B. Therefore, potential impacts to these features would be significant without mitigation; however, implementation of Measures BIO-6 and BIO-7 would require jurisdictional waters avoidance and compensatory mitigation for impacts to jurisdictional waters, which would reduce impacts to a less-than-significant level.

The Rincon Creek crossing would be constructed using trenchless methods (HDD). Indirect impacts from HDD and/or construction materials (e.g., stockpiled materials, construction equipment, and trash) which may be stored on site could adversely affect water quality (e.g., increased turbidity, altered pH, decreased dissolved oxygen levels, etc.) within the jurisdictional waters if runoff were to occur during storm events. Therefore, measures BIO-6 and BIO-7 shall be implemented within 100 feet of Rincon Creek, Casitas Creek, Coyote Creek, and the unnamed drainage to avoid potential indirect impacts to water quality within these jurisdictional features. With implementation of these mitigation measures (and adherence to agency permits and existing regulations), potential indirect impacts to jurisdictional features would be reduced to a less than significant level.

Mitigation Measures

With implementation of mitigation measures (and adherence to agency permits and existing regulations), potential indirect impacts to jurisdictional features would be reduced to a less-than-significant level.

BIO-6 Jurisdictional Waters Avoidance and Minimization

The following measures shall be implemented during project construction:

- Prior to project mobilization, all limits of construction work within Casitas Creek and the unnamed drainage shall be clearly delineated with orange construction fencing or similar highly visible material and maintained throughout the duration of construction.
- Areas of temporary disturbance shall be minimized to the extent practicable. Staging and laydown areas shall be limited to sites which are unvegetated and/or previously disturbed, and outside jurisdictional aquatic features.
- Materials shall be stored on impervious surfaces or plastic ground covers to prevent spills or leakage. Material storage and material/spoils from project activities shall be located and stored at least 50 feet from jurisdictional aquatic features. Construction materials and spoils shall be protected from stormwater runoff using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate.
- Prevent the discharge of silt or pollutants off the site when working adjacent to potentially jurisdictional waters. Install BMPs (i.e., silt barriers, sand bags, straw bales) as appropriate.
- Prevent the off-site tracking of loose construction and landscape materials by implementing street sweeping, vacuuming, and rumble plates, as appropriate.
- Site washout areas shall be at least 100 feet from a storm drain, open ditch, or surface water and prevent runoff flows from such activities from entering receiving water bodies.

- All vehicles and equipment shall be in good working condition and free of leaks. The contractor shall prevent oil, petroleum products, or any other pollutants from contaminating the soil or entering a watercourse (dry or otherwise). When vehicles or equipment are stationary, mats, or drip pans shall be placed below vehicles to contain fluid leaks.
- All re-fueling, cleaning, and maintenance of equipment shall occur at least 100 feet from potentially jurisdictional waters.
- Any spillage of material shall be stopped if it can be done safely. The contaminated area shall be cleaned, and any contaminated materials properly disposed. For all spills, the project foreperson or other designated liaison shall notify Casitas immediately.
- Adequate spill prevention and response equipment shall be maintained on site and readily available to implement to minimize impacts to the aquatic and marine environments.

BIO-7 Compensatory Mitigation for Jurisdictional Waters Impacts

The following measures shall be implemented to mitigate impacts to jurisdictional wetlands/waters:

- Permits for the proposed impacts to jurisdictional waters shall be obtained prior to initiating impacts. The discharge of fill into USACE jurisdictional areas will require a permit pursuant to Section 404 of the Clean Water Act and a 401 Certification from the RWQCB, and any modification to a streambed, including removal of riparian vegetation, will require a Streambed Alteration Agreement from CDFW pursuant to Section 1600 of the CFGC. The project shall comply with the mitigation required in accordance with the Streambed Alteration Agreement and the 401 and 404 permits.
- Impacts associated with disturbed areas within regulated waters shall be mitigated in-kind at a ratio of at least 1:1. It should be noted the final mitigation ratios required by the regulatory agencies during the permitting process may differ, but shall be confirmed prior to the initiation of applicable construction activities.
- A Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared by a qualified biologist/restoration ecologist to restore jurisdictional waters and/or CDFW sensitive plant communities temporarily impacted by the project. The HMMP shall address the restoration of temporarily disturbed habitat. At a minimum, the HMMP shall include the following:
    - A description of the jurisdictional waters, sensitive plant communities, riparian habitat, and/or ESHA type(s) and amount(s) which will be provided by the mitigation and how the mitigation method (i.e., restoration, establishment, enhancement, and preservation) will achieve the mitigation project goals
    - A plant palette and methods of salvaging, propagating, and seeding/planting the site to be restored
    - Methods of soil preparation
    - Maintenance and monitoring necessary to confirm the restored plant communities meet the success criteria
    - Schedule for restoration activities including weed abatement, propagation and planting, soil preparation, erosion control, qualitative and quantitative monitoring, and reporting
    - Identification of measurable performance standards for each objective to evaluate the success of the compensatory mitigation
    - Identification of contingency and adaptive management measures to address unforeseen changes in site conditions or other components of the mitigation project

- Compensatory mitigation for permanent impacts to jurisdictional waters can be accomplished either through purchase of credits through an approved Mitigation Bank or through applicant sponsored mitigation (e.g., purchase and/or dedication of land for mitigation). Compensatory mitigation shall be determined and approved by CDFW, USACE, and RWQCB prior to impacting state of federally regulated waters. If on-site or off-site restoration would occur, a Restoration Plan shall be prepared and submitted for approval by CDFW, USACE, and RWQCB prior to initiating impacts. At minimum, the Restoration Plan shall include the following:
  - A description of the purpose and goals of the restoration
  - Identification of success criteria and performance standards
  - Methods of site preparation
  - Irrigation plan and schedule
  - Best Management Practices (BMPs)
  - Maintenance and monitoring program
  - Adaptive management strategies
  - Key stakeholders and responsible parties
  - Funding
  - Contingencies.

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d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Direct and indirect impacts to wildlife movement are not anticipated due to the type of construction, hours of operation and current human presence surrounding this project area., Construction associated with the proposed project would be temporary and no permanent fencing would be erected which would interfere with terrestrial wildlife movement, in addition, construction will be limited to daylight hours only, except for a small period of time during HDD drilling which would occur nonstop for 48 hours. The project would not substantially limit or fragment the geographic range or dispersal routes of any sensitive species. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Santa Barbara County Article II Coastal Zoning Ordinance *Section 35-97.6* and *Section 35-97.18* supports the preservation of native plant communities and the species they support. A CDP is required if impacts to native plant communities (i.e., California native oak woodland and individual oak trees) will occur. Within Santa Barbara County, potential direct impacts from the project within 100 feet of areas meeting the definition a native plant community are expected to be limited to the existing public right-of-way and restored to pre-existing project conditions. Therefore, direct impacts to native plant communities protected by this ordinance would be less than significant. Furthermore, implementation of BIO-1, BIO-4, BIO-5 would further minimize impacts to native plant communities through avoidance, restoration, and compensatory mitigation as applicable. With

compliance with a CDP (if required) and implementation of these measures, the project would not conflict with this ordinance.

Trees meeting the Counties of Ventura and Santa Barbara tree protection standards were observed throughout the Study Area. A large portion of the proposed project alignment is located within developed public rights-of-way which are lined with protected trees (e.g., coast live oak, arroyo willow, California sycamore, southern California walnut, and elderberry). Potential impacts to protected trees may include, but are not limited to, construction equipment compacting soil around the trees, disturbance of the canopy and the root zone, and trenching in the root zone. No protected trees are proposed for removal. Mitigation measure BIO-8 would reduce potential impacts to protected trees. With the appropriate County of Ventura and County of Santa Barbara permits and with implementation of this measure, the proposed project would not conflict with the Ventura County General Plan Coastal Area Plan *4.1.5., Tree Protection*, Ventura County Coastal Zoning Ordinance *Section 8178-7 – Tree Protection Regulations* and *Section 35-97.18 Development Standards for Native Plant Community Habitats*, Santa Barbara County Article II Coastal Zoning Ordinance *Section 35-140 Tree Removal*, and Santa Barbara County Comprehensive Plan: Conservation Element *Oak Tree Protection in the Inland Rural Areas of Santa Barbara County*.

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BIO-8 Arborist Study and Tree Protection Plan

An Arborist Study shall be conducted within portions of the project footprint occurring within 20 feet of the canopy drip line of protected trees. The study will plot the location of protected trees within this zone, identify each protected tree, and determine the jurisdiction of any trees to be impacted. The Arborist Report shall be prepared by a Certified Arborist in compliance with both the County of Ventura and County of Santa Barbara ordinance guidelines (including coastal zone guidelines). Specifically, the Arborist Report should include, at minimum, the following:

- An inventory of all trees containing a canopy drip line within 20 feet of the project footprint, as feasible without trespassing on private lands. Inventory data should record, at minimum: diameter at breast height (DBH), height, canopy cover information/mapping, health and vigor rating.
- Representative photographs of each regulated tree which may be encroached upon.
- Description of proposed site development activities including, but not limited to, excavation for trenching, any tree trimming for access, and construction access routes.
- A project-specific Tree Protection Plan shall be prepared which would at a minimum include site plans, protective tree fencing, the designated tree protection zone (identifying an area sufficiently large enough to protect the tree and its roots from disturbance), activities prohibited/permitted within the tree protective zone, encroachment boundaries, and potential transplanting or replacement tree plantings.

The Arborist Report shall be completed consistent with the tree ordinance guidelines of the County of Ventura and County of Santa Barbara prior to the start of any tree-disturbing construction activities.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The project does not occur within any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan areas. The proposed project would not conflict with the provisions of any such plans. Therefore, no impact would occur.

NO IMPACT

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5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	■	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	■	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	■	☐

Information in this section regarding cultural (i.e., archaeological and historical) resources includes data from the Cultural Resources Assessment (Appendix C) prepared by Rincon Consultants, Inc. The significance of cultural resources and impacts to those resources is determined by whether or not those resources can increase our collective knowledge of the past. The primary determining factors are site content and degree of preservation.

A "substantial adverse change" in the significance of a historical resource is defined as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." State CEQA Guidelines Section 15064.5(b) states the significance of an historical resource is "materially impaired" when a project does any of the following:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource conveying its historical significance and justifying its inclusion in, or eligibility for inclusion in the California Register of Historical Resources (CRHR)
- Demolishes or materially alters in an adverse manner those physical characteristics accounting for its inclusion in a local register of historical resources or its identification in an historical resources survey, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence the resource is not historically or culturally significant
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource conveying its historical significance and justifying its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA

State CEQA Guidelines Section 15064.5 also states the term "historical resources" shall include the following:

1) A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the CRHR (Public Resources Code [PRC] Section 5024.1, Title 14, CCR, Section 4850 et. seq.).

2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates it is not historically or culturally significant.
3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the CRHR (PRC Section 5024.1, Title 14 CCR, Section 4852) as follows:
    - Is associated with events which have made a significant contribution to the broad patterns of California's history and cultural heritage
    - Is associated with the lives of persons important in our past
    - Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
    - Has yielded, or may be likely to yield, information important in prehistory or history (State CEQA Guidelines Section 15064.5)

Properties listed on the National Register of Historic Properties (NRHP) are automatically listed on the CRHR, along with State Landmarks and Points of Interest. The CRHR can also include properties designated under local ordinances or identified through local historical resource surveys.

To address historical resources and archaeological resources, a cultural resources study was prepared for the project including a cultural resources records search at the South Central Coastal Information Center (SCCIC) and pedestrian survey. The study was documented in the Cultural Resources Assessment (Appendix C), with confidential information removed and on file with Casitas.

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

Five built environment resources are located within the project site; this includes two resources identified during the field surveys, the Rincon Chlorination Station and Rincon Pump Plant, and three previously identified built environment resources, State Route 192 (P-42-003622), Abbott Ranch (P-56-152756), and the Southern California Edison (SCE) Santa Clara-Ojai-Santa Barbara 66kV Transmission Line (P-56-153060). Each built environment resource within the project site was surveyed and evaluated for listing in the NRHP, the CRHR, and local significance.

None of the five built environment resources identified within the project site are eligible for listing in the NRHP or the CRHR. Four of the built environment resources (Rincon Chlorination Station, Rincon Pump Plant, State Route 192 and the SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line) were also found ineligible for local designation; therefore, they are not considered historic properties for the purposes of the NHPA or historical resources in accordance with CEQA. One property, the Abbott Ranch, while not eligible for the NRHP or the CRHR, is eligible for local designation as a Ventura County Site of Merit. Locally eligible properties are considered historical resources for the purposes of CEQA. The project involves the installation of underground piping through a section of Abbott Ranch which would not result in substantial adverse change to the historical resource as defined by CEQA Guidelines §15064.5. The project would not physically

demolish, destroy, relocate, or alter Abbott Ranch or its surroundings in a manner in which its significance would be materially impaired. The historical resource would continue to retain the physical characteristics which convey its historical significance and justify its inclusion in a local register of historical resources. Impacts related to historical resources would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Results of the cultural resources assessment indicate no archaeological resources are located within the project site. In addition to the negative study findings, existing disturbances from development suggests there is a low potential for encountering intact subsurface archaeological deposits within the project site. However, potential impacts to archaeological resources could occur in the unlikely event archaeological resources are unexpectedly discovered during project construction. If archaeological resources are unexpectedly discovered, Mitigation Measure CUL-1 would be implemented to reduce impacts to a less-than-significant level. With implementation of Mitigation Measure CUL-1, potential impacts resulting from the unanticipated discovery of previously unknown archaeological resources would be less than significant, as all work would be temporarily halted, and the archaeological resource would be assessed and evaluated consistent with all state and local guidelines.

Mitigation Measures

CUL-1 Unanticipated Discovery of Cultural Resources

In the event archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist to be prehistoric, then a Native American representative 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 California Register of Historical Resources (CRHR) eligibility shall be completed. If the resource proves to be eligible for the CRHR and significant impacts to the resource cannot be avoided via project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of CCR Guidelines Section 15126.4(b)(3)(C). 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 which justifies the resource's significance. Casitas 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 California Historical Resources Information System, per CCR Guidelines Section 15126.4(b)(3)(C).

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c. Would the project disturb any human remains, including those interred outside of formal cemeteries?

No human remains are known to be present within the project site. The proposed project would primarily be constructed in existing roadways and on previously disturbed land. However, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states 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 prehistoric, the Coroner would notify the Native American Heritage Commission, which would 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, impacts to human remains would be less than significant.

LESS THAN SIGNIFICANT IMPACT

6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	■
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	■

California is the second lowest per capita energy users in the United States due to its energy efficiency programs and mild climate (United States Energy Information Administration [U.S. EIA] 2022). California consumed 279,510 gigawatt-hours (GWh) of electricity and 12.3 billion therms of natural gas in 2020 (California Energy Commission [CEC] 2022a and 2022b). The single largest end-use sector for energy consumption in California is transportation (39.3 percent), followed by industry (23.2 percent), commercial (18.8 percent), and residential (18.7 percent) (U.S. EIA 2022).

Most of California's electricity is generated in state with approximately 30 percent imported from the United States and Canadian northwest, and United States and Mexico southwest in 2020; however, the state relies on out-of-state natural gas imports for nearly 90 percent of its supply (CEC 2022d and 2022e). In addition, approximately 33 percent of California's electricity supply in 2020 came from renewable energy sources, such as wind, solar photovoltaic, geothermal, and biomass (CEC 2022d). In 2018, Senate Bill 100 accelerated the state's Renewable Portfolio Standards Program, codified in the Public Utilities Act, by requiring electricity providers to increase procurement from eligible renewable energy and zero-carbon resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Petroleum fuels are primarily consumed by on-road and off-road equipment in addition to some industrial processes, with California being one of the top petroleum-producing states in the nation (CEC 2022f). Gasoline, which is used by light-duty cars, pickup trucks, and sport utility vehicles, is the most used transportation fuel in California with 12.6 billion gallons sold in 2020 (CEC 2022c). Diesel, which is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles, is the second most used fuel in California with 1.7 billion gallons sold in 2021 (CEC 2022c).

Energy consumption is directly related to environmental quality as the consumption of nonrenewable energy resources releases criteria air pollutant and greenhouse gas (GHG) emissions into the atmosphere. The environmental impacts of air pollutant and GHG emissions associated with the project's energy consumption are discussed in detail in Section 3, *Air Quality*, and Section 8, *Greenhouse Gas Emissions*, respectively.

a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Energy use during project construction would be primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators. Temporary grid power may also be provided to construction trailers or electric construction equipment. Energy use during construction would be temporary in nature, and construction equipment used would be typical of construction projects in the region. As shown in Table 6, project construction would require approximately 5,135 gallons of gasoline and approximately 132,214 gallons of diesel fuel. These construction energy estimates are conservative because they assume the construction equipment used in each phase of construction would be operating every day of construction.

Table 6 Estimated Fuel Consumption during Construction (gallons)

Source	Gasoline	Diesel
Construction Equipment & Hauling Trips	–	132,214
Construction Worker Vehicle Trips	5,135	–
See Appendix G for energy calculation sheets		

Furthermore, in the interest of cost efficiency, construction contractors would not utilize fuel in a manner which is wasteful or unnecessary. Therefore, project construction would not result in a potential impact due to wasteful, inefficient, or unnecessary consumption of energy resources, and no construction-related energy impact would occur.

For the purpose of this Initial Study, it is conservatively estimated operation of the proposed project would occur for approximately 680 hours per year. Under these conditions, the booster pump stations would require 662,200 kWh of electricity annually. The water treatment equipment at BPS-A would require an additional 2,200 kWh of electricity annually under the same conditions. The proposed project would facilitate the transfer of water between Casitas and CVWD, thereby improving regional water supply reliability. Ventura and Santa Barbara counties are susceptible to natural disasters such as wildfires, landslides, and earthquakes. The project would allow Casitas and CVWD to transfer local potable water supplies, as necessary, and improve the resiliency of the local water distribution network. Energy consumption would not be wasteful because the project would only be operated as necessary for the transfer of local potable water supplies. Therefore, no operational energy impact would occur.

NO IMPACT

b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

As mentioned above, SB 100 mandates 100 percent clean electricity for California by 2045. Because the proposed project would be powered by the existing electricity grid, the project would eventually be powered by renewable energy mandated by SB 100 and would not conflict with this statewide plan. Casitas MWD does not have any specific renewable energy or energy efficiency plans with which the project could comply. As discussed in Section 8, *Greenhouse Gas Emissions,* the proposed project would be consistent with policies contained in the Ventura County 2040 General Plan and Santa Barbara Energy and Climate Action Plan, such as water efficiency and maximizing the reliability of local water resource (County of Ventura 2020b; County of Santa Barbara 2015b). While

the proposed project would not specifically involve water efficiency, it would improve the reliability and resiliency of the local water supply system. Therefore, the project would not conflict with or obstruct the state plan for renewable energy, and no impact would occur.

NO IMPACT

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7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	■	☐
2. Strong seismic ground shaking?	☐	☐	■	☐
3. Seismic-related ground failure, including liquefaction?	☐	☐	■	☐
4. Landslides?	☐	☐	■	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	■	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	■	☐
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	■	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	■
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	■	☐	☐

The analysis contained in this section is based in part on the *Preliminary Geotechnical and Trenchless Engineering Evaluation for Rincon Creek Undercrossing for the Santa Barbara-Ventura Tie-In Pipeline*, prepared by DCM Consulting, Inc. (DCM) in May 2019, as well as the *Preliminary (Desktop) Geotechnical Report for the Santa Barbara-Ventura Tie-In Pipeline*, prepared by Bajada Geosciences, Inc. (BGI) in March 2019. These preliminary geotechnical reports are included as Appendices D1 and D2, respectively.

Geologic Setting

The project site is situated in the foothills and Casitas Pass area of the Santa Ynez Mountains in Ventura and Santa Barbara counties. The project site is located in the Transverse Ranges Geomorphic Province, characterized by anomalous east-west trending mountain ranges. The province is bounded on the north by the Coastal Ranges (Sierra Madre Mountains), on the south by the Peninsular Ranges, on the east by the Mojave Desert, and on the west by the Pacific Ocean.

The Transverse Ranges Geomorphic Province is seismically active, bounded by three major fault zones, including the San Andreas Fault and Big Pine Fault to the north and the Malibu Coast Fault to the south. Seismic events can result in groundshaking, liquefaction, landslides, subsidence, tsunamis, and seiches. In addition to the three major faults, numerous smaller regional and local faults are located in and around the project site, including the Shepard Mesa Fault, Rincon Creek Fault, Carpinteria Fault, and Arroyo Parida Fault (Mission Ridge Fault Zone). According to the Geotechnical Report prepared for the project, the nearest fault to the project site is a mapped trace of the Rincon Creek Fault, which transects the project site along SR 192 near Rincon Creek (BGI 2019).

a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

The project site is located in a seismically-active area of southern California; however, the project site is not located in an Alquist-Priolo Earthquake Fault Zone (DOC 2019; BGI 2019). As previously stated, the project site is within the vicinity of multiple regional and local faults, including the Rincon Creek Fault, which intersects the proposed pipeline alignment near Rincon Creek and to the east, near the proposed pipeline's connection to the existing Rincon Pipeline (BGI 2019). The BGI Geotechnical Report states deterministic and probabilistic rupture offsets of 20 and 12 inches, respectively, may occur across the fault due to an earthquake on the Rincon Creek Fault, based on a two percent chance of exceedance in any 50-year period. The BGI Geotechnical Report concludes such offsets could deform and damage the proposed pipeline.

Design and construction of the proposed project would conform to the current seismic design provisions of the California Building Code (CBC). The 2019 CBC incorporates the latest seismic design standards for structural loads and materials, as well as provisions from the National Earthquake Hazards Reduction Program, to reduce losses from an earthquake and provide for the latest in earthquake safety. While the project would be susceptible to seismic activity given its location within a seismically-active area, the project would be required to minimize this risk, to the extent feasible, through incorporation of applicable CBC standards and project-specific seismic design parameters detailed in the BGI Geotechnical Report. A large seismic event, such as a fault rupture,

seismic shaking, or ground failure, could result in breakage of the proposed pipeline, damage to the pump stations, failure of joints, and/or underground leakage from the pipeline. The project proposes no habitable structures on the Rincon Creek Fault, and therefore, would not expose people to the potential risk of loss, injury, or death. In the event an earthquake and/or fault rupture compromised any project component during operation, water to the proposed infrastructure would be temporarily shut-off and emergency repairs conducted as soon as possible. Therefore, the project would not expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving strong seismic ground shaking or fault rupture. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related liquefaction?

Liquefaction is the sudden loss of soil shear strength due to a rapid increase of soil pore water pressures caused by cyclic loading from a seismic event. This means a liquefied soil which acts more like a fluid than a solid when shaken during an earthquake. Areas susceptible to liquefaction are characterized by low-density granular soils (e.g., sand, silty sand) and a high groundwater table. According to the BGI Geotechnical Report, granular soils were previously reported in the project vicinity. In addition, relatively shallow groundwater at depths up to eleven feet below ground surface were encountered in boring explorations along Rincon Creek in the project area (BGI 2019). According to the BGI Geotechnical Report, shallow groundwater is anticipated to be encountered at trench excavation depths along portions of the pipeline alignments underlain by young and intermediate alluvium and could be encountered along other portions of the proposed pipeline alignments. When combined with variable groundwater levels near Rincon Creek, granular soils could have the potential to liquefy during a seismic event. Seismically-induced liquefaction could potentially damage the proposed pipeline in the event of an earthquake, resulting in joint failure or leakage from the pipeline.

As discussed under items (a.1) and (a.2) of this section, the project would be constructed in accordance with the current seismic design provisions of the CBC and project-specific seismic design parameters contained in the BGI Geotechnical Report. The project involves construction of water infrastructure and would not involve placement of habitable structures within a liquefaction-prone area, thereby minimizing the potential to result in loss, injury, or death involving seismic-related ground failure due to liquefaction. With adherence to existing regulatory requirements and recommendations in the BGI Geotechnical Report, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related landslides?

According to the Ventura County 2040 General Plan, seismically-induced landslides are expected throughout Ventura County, particularly in areas with steep slopes, during a major earthquake (County of Ventura 2020b). The Hazards and Safety chapter of the Ventura County 2040 General Plan Background Report identifies the area in the vicinity of the project site as having high susceptibility to landslides (County of Ventura 2020a). The Santa Barbara County Comprehensive Plan Safety Element identifies land in the vicinity of the project site as having a generally low to low-moderate landslide rating (County of Santa Barbara 2015a). The BGI Geotechnical Report notes the

head scarps[4] of landslides caused by cut-bank erosion along Rincon Creek are affecting SR 192 and could destabilize the proposed pipeline in this area; however, this area is where HDD would occur to cross Rincon Creek, which would minimize potential effects associated with potential landslides in the project area.

In the vicinity of the existing landslide area identified in the BGI Geotechnical Report, the proposed pipeline would be constructed underneath SR 192. Following construction, the project site would be restored to its existing condition or better. Therefore, the project would not exacerbate the risk of slope instability or landslide beyond current conditions due to erosion along Rincon Creek.

In the event of a major earthquake, seismically-induced landslides could damage project facilities. Should a landslide compromise any project component during operation, water would temporarily be shut-off to the affected infrastructure and emergency repairs would be conducted as soon as possible. Furthermore, the project would not include construction of any habitable structures which would directly or indirectly expose people to risk of loss, injury, or death involving landslides. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

The majority of the project site has been previously disturbed. Construction activities involving soil disturbance, such as excavation, stockpiling, and grading, could result in erosion. However, soil erosion due to construction in Ventura County would be minimized via implementation of erosion-control BMPs in accordance with the *Waste Discharge Requirement for Stormwater (Wet Weather) and Non-Stormwater (Dry Weather) Discharges from the Municipal Separate Storm Sewer Systems within the Ventura County Watershed Protection District, County of Ventura and the Incorporated Cities Therein* (Order R4-2010-0108, NPDES Permit No. CAS004002; Ventura County MS4 Permit) and the *Waste Discharge Requirements and General NPDES Permit for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties* (Order R4-2018-0125, NPDES Permit No. CAG994004). Similarly, in Santa Barbara County, construction BMPs would be implemented in accordance with the County of Santa Barbara's Phase II MS4 permit (*Waste Discharge Requirements for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems*, Order 2013-0001-DWQ, WDID Number 3 42M2000047) and the *Waste Discharge Requirements NPDES General Permit for Discharges of Highly Treated Groundwater to Surface Waters* (in the RWQCB Central Coast Region; Order R3-2016-0035, NPDES Permit No. CAG993002). In addition, all project components would be subject to the requirements under the Construction General Permit (Order No. 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). Compliance with the MS4 Permits requires implementation of an effective combination of erosion and sediment control BMPs, such as hydraulic mulch and hydroseeding, silt fencing and sandbag barriers, spill prevention and control, soil binders, and street sweeping, to prevent erosion and sediment loss. Furthermore, the Construction General Permit requires the development of a SWPPP to reduce erosion and topsoil loss from stormwater runoff. Compliance with the requirements set forth in these permits would require the proposed project to implement BMPs during construction and prevent substantial soil erosion or the loss of topsoil. The project-specific SWPPP would include additional erosion control BMPs, such as covering of stockpiles, use of desilting basins, limitations on work during high-wind events, and post-

[4] A "head scarp" is a steep (nearly vertical) region of exposed soil and rock at the top of a landslide.

construction revegetation and drainage requirements. With implementation of construction BMPs and SWPPP, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

As previously discussed under items (a.1) through (a.4), the project is located in a seismically-active region. The BGI Geotechnical Report concludes liquefiable soils may underlie portions of the project site. Within Ventura County, the project site is located near a mapped landslide area immediately south of SR 150, near the proposed BPS-B location. Additionally, the BGI Geotechnical Report notes the presence of a landslide area near the proposed pipeline alignment near SR 192 and Rincon Creek in Santa Barbara County. No portion of the project site is located in a documented subsidence zone, according to the Ventura County 2040 General Plan Draft Environmental Impact Report (2020c), or on highly-collapsible soils, according to the Santa Barbara County Comprehensive Plan Safety Element (County of Santa Barbara 2015a).

As previously discussed, the project would be constructed in accordance with requirements of the 2019 CBC and recommendations provided in design-level geotechnical analyses. The proposed pipeline would be constructed below ground level, primarily within public and private road rights-of-way and agricultural areas. Following construction, the project site would be restored to its existing condition or better. Therefore, although the project would be located in a seismically active area, the project is not anticipated to adversely affect soil stability or increase the potential for regional and local landslides, subsidence, liquefaction, or collapse. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Expansive soils expand when wet and contract when dry, potentially creating cracks in foundations and causing considerable damage to structures (County of Ventura 2013). According to the BGI Geotechnical Report, soils in the project site and vicinity have an expansion potential ranging from very low to high, with an average expansion potential of low to medium (BGI 2019). While the BGI Geotechnical Report recommends design-level geotechnical studies to evaluate the presence of highly expansive soils and provide recommendations for project design and construction if expansive soils are encountered, the report also states expansive soils are unlikely to adversely impact the proposed pipeline due to its depth below ground surface.

The project would be constructed in accordance with the requirements of the 2019 CBC and any project-specific recommendations contained in design-level geotechnical studies, such as relative compaction standards or expansion index limitations for imported backfill material. The project would not involve construction of habitable structures, which reduces potential risks to life and property in the event expansive soils are present on the project site. Given the nature of the project, existing regulatory requirements, and the generally low to medium expansion potential of soils in the vicinity of the project site, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The proposed project would not include the use of septic tanks or alternative wastewater disposal systems. No impact would occur.

NO IMPACT

f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Paleontological resources, or fossils, are the evidence of once-living organisms preserved in the rock record. They include both the fossilized remains of ancient plants and animals and the traces thereof (e.g., trackways, imprints, burrows, etc.). Paleontological resources are not found in "soil" but are contained within the geologic deposits or bedrock underlying the soil layer. Typically, fossils are greater than 5,000 years old (i.e., older than middle Holocene in age) and are typically preserved in sedimentary rocks. Although rare, fossils can also be preserved in volcanic rocks and low-grade metamorphic rocks under certain conditions (Society of Vertebrate Paleontology [SVP] 2010). Fossils occur in a non-continuous and often unpredictable distribution within some sedimentary units, and the potential for fossils to occur within sedimentary units depends on several factors. It is possible to evaluate the potential for geologic units to contain scientifically important paleontological resources, and therefore, evaluate the potential for impacts to those resources and provide mitigation for paleontological resources if they are discovered during construction of a development project.

The paleontological sensitivity of the geologic units underlying the project site was evaluated using the results of the paleontological locality search and review of existing information in the scientific literature concerning known fossils within such geologic units. Fossil collections records from the University of California Museum of Paleontology (UCMP; 2022) online database and Paleobiology Database (PBDB; 2022), which contains known fossil localities in Ventura and Santa Barbara counties, were examined. In addition, a list of known fossil localities in the project site and immediate vicinity (i.e., localities recorded on the United States Geologic Survey *White Ledge Peak*, 7.5-minute topographic quadrangle) was requested from the Natural History Museum of Los Angeles County.

Following the literature review and museum records search, a paleontological sensitivity classification was assigned to the geologic units underlying the project site. The SVP (2010) developed a system for assessing paleontological sensitivity and describes sedimentary rock units as having high, low, undetermined, or no potential for containing scientifically significant nonrenewable paleontological resources, the locations of vertebrate fossils or significant invertebrate fossils discovered during previous studies.

Per mapping by Tan and Clahan (2004), the proposed intertie pipeline is underlain by six geologic units: Holocene-aged undivided alluvial deposits, Holocene-aged alluvial fan deposits, Pleistocene-aged paralic deposits, Pleistocene-aged alluvial deposits, Casitas Formation, and Sespe Formation (Figure 7 through Figure 9). Holocene-aged undivided alluvial deposits underlie the proposed pipeline in low-lying areas (such as near Rincon Creek), BPS-A, part of BPS-B, part of the construction staging areas for BPS-A and BPS-B, and the Rincon Pumping Plant (Figure 7 through Figure 9). Holocene-aged undivided alluvial deposits consist of unconsolidated, poorly sorted, sandy clay with locally abundant gravel (Tan and Clahan 2004; Tan et al. 2003). Holocene-aged undivided

alluvial deposits are generally considered too young (i.e., less than 5,000 years old) to preserve paleontological resources, and therefore, have low paleontological sensitivity.

Holocene-aged alluvial fan deposits underlie the westernmost portions of the proposed pipeline (Figure 7). Holocene-aged alluvial fan deposits consist of moderately to poorly sorted, moderately to poorly bedded, sandy clay with some silt and gravel layers (Tan and Clahan 2004). Holocene-aged alluvial fan deposits are generally considered too young (i.e., less than 5,000 years old) to preserve paleontological resources, and therefore, have low paleontological sensitivity.

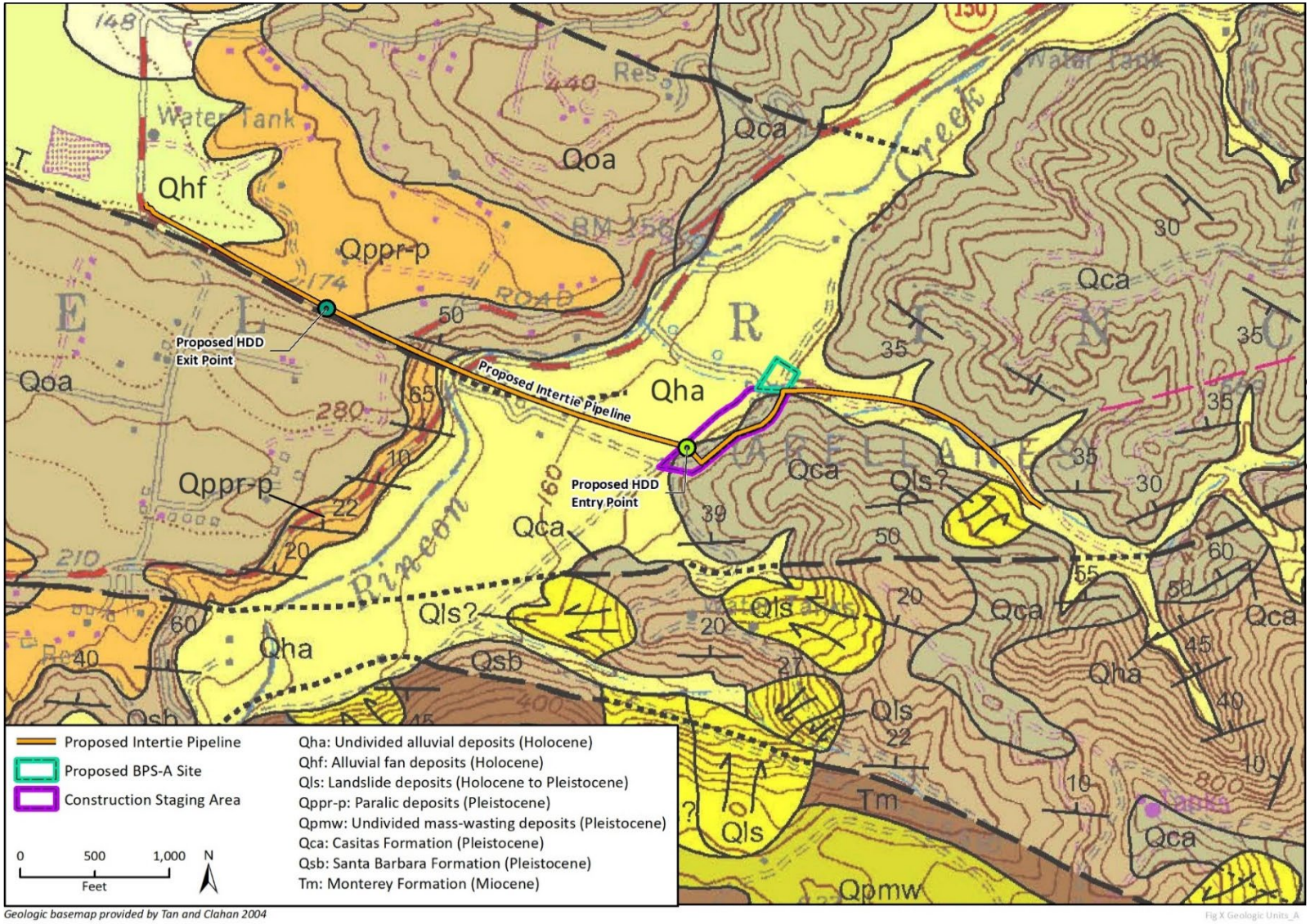
Pleistocene-aged alluvial deposits not assigned to named formations underlie part of the proposed pipeline west of Rincon Creek (Figure 7). Pleistocene-aged alluvial deposits consist of poorly sorted, poorly bedded, silt, sand, and gravel (Tan and Clahan 2004). Pleistocene-alluvial deposits, which have a well-documented record of scientifically significant fossils throughout California, including Santa Barbara and Ventura counties, yielding taxa such as of mastodon (*Mammut*), eared seal (*Arctocephalus*, *Eumetopias*), sea otter (*Enhydra*), turtles, birds, fish, and invertebrates (McLeod 2019; PBDB 2022; UCMP 2022). Therefore, Pleistocene-aged alluvial deposits have high paleontological sensitivity.

Pleistocene-aged paralic deposits underlie part of the proposed pipeline west of Rincon Creek (Figure 7). Pleistocene-aged paralic deposits represent marine terrace deposits consisting of poorly sorted sandy clay with local gravel lenses (Tan and Clahan 2004). Marine terrace deposits have produced vertebrate and invertebrate fossils throughout California, including in Santa Barbara and Ventura Counties (Bradley and Addicott 1968, Jefferson 2010, Powell et al. 2004, Wright 1972). Therefore, Quaternary marine terrace deposits have high paleontological sensitivity.

The Casitas Formation underlies part of the proposed pipeline and the construction staging area for BPS-A east of Rincon Creek (Figure 7). The Casitas Formation consists of poorly consolidated sandstone and siltstone and is Pleistocene in age (Tan and Clahan 2004). No fossil localities are reported from the Casitas Formation, but in this area, the Casitas Formation is interfingered with the paleontologically sensitive Santa Barbara Formation, and therefore, may contain significant paleontological resources (McLeod 2019). The Santa Barbara Formation yields significant marine vertebrate fossils (e.g., fish) and is known to contain a diverse assemblage of marine invertebrates, including mollusks, bryozoans, and foraminifers (McLeod 2019; UCMP 2022). Therefore, the Casitas Formation has high paleontological sensitivity.

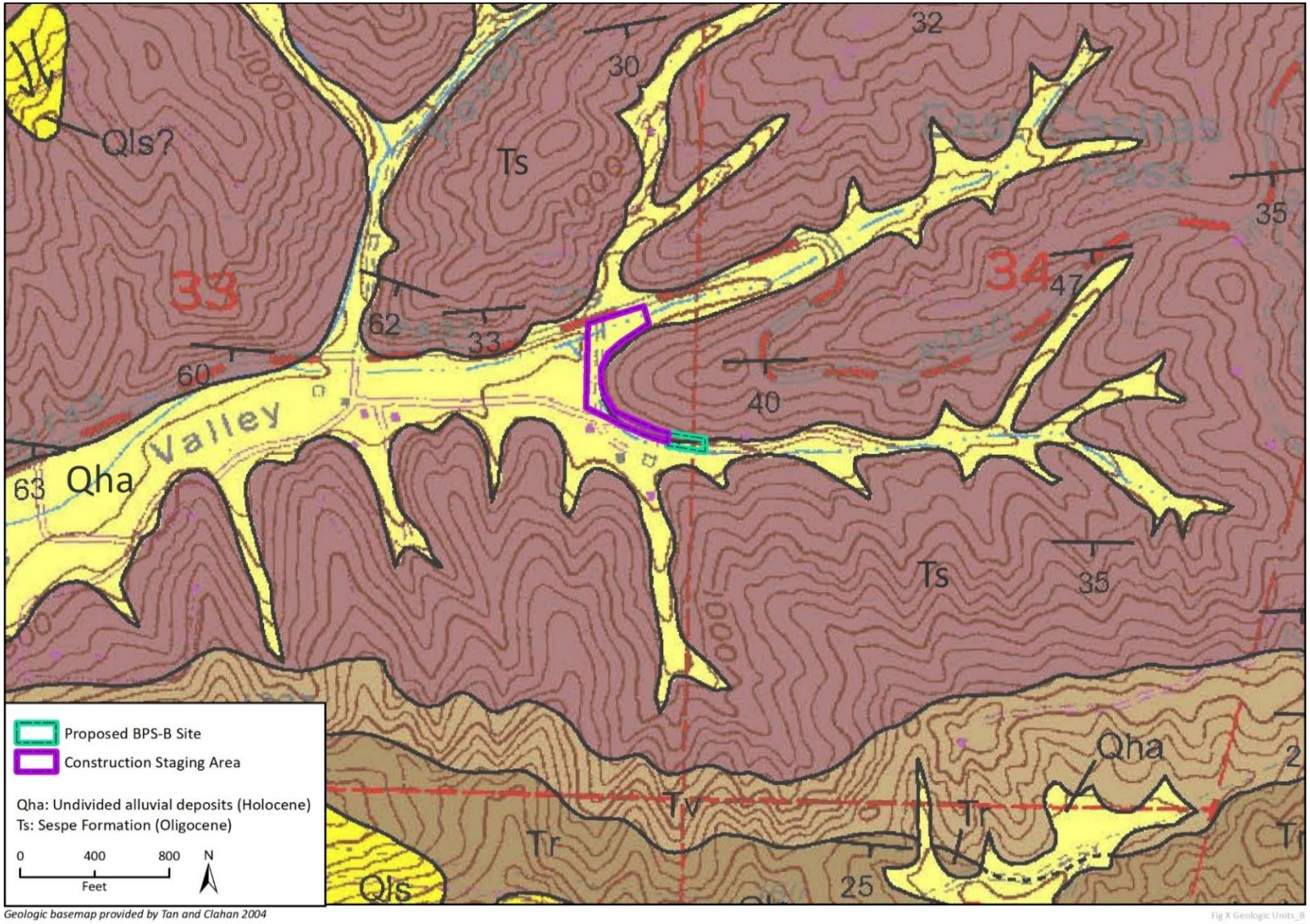
The Sespe Formation underlies part of the proposed site and construction staging area for BPS-B and the Rincon Chlorination Station (Figure 8 and Figure 9). The Sespe Formation consists of pebbly sandstone, siltstone, and claystone, which is Oligocene and Eocene in age (Tan and Clahan 2004). The Sespe Formation has produced many significant fossils in Santa Barbara and Ventura Counties, including mammals (Primates, Carnivorans, Artiodactyla, Perissodactyla, Rodentia), reptiles (lizards, snakes, turtles), and invertebrates (Kelly 1990, 2010; PBDB 2022; UCMP 2022). Therefore, the Sespe Formation has high paleontological sensitivity.

Figure 7 Geologic Units Underlying Pipeline Alignment and Booster Pump Station A



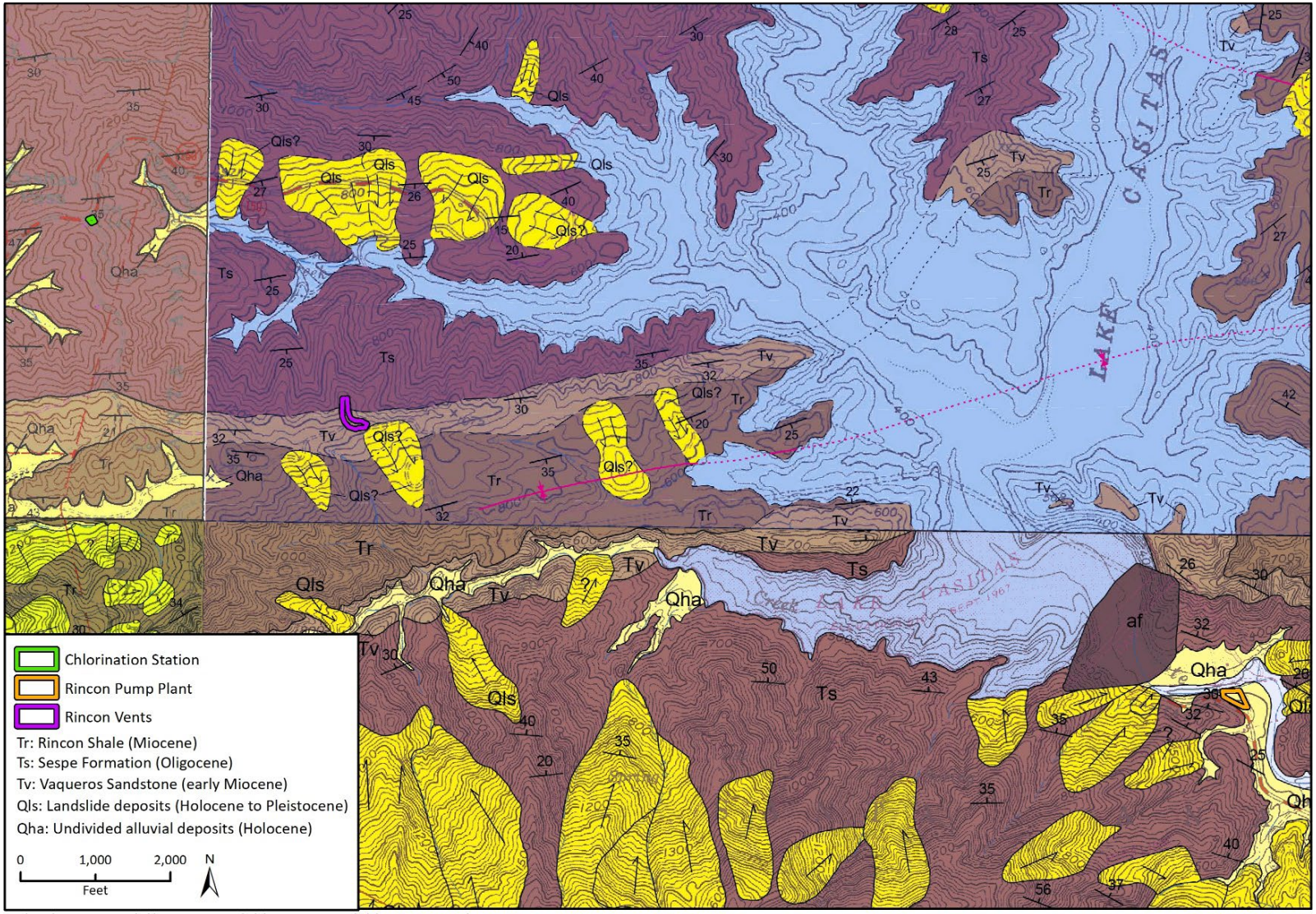
Geologic basemap provided by Tan and Clahan 2004

Figure 8 Geologic Units Underlying Booster Pump Station B



Geologic basemap provided by Tan and Clahan 2004

Figure 9 Geologic Units Underlying Infrastructure Improvement Areas



Geologic basemaps provided by Tan, Jones, and Clahan 2003; Tan and Clahan 2004; Tan and Jones 2006

Fig X Geologic Units_C_20220928

The paleontological locality records show no previously recorded fossil localities in the project site; however, several vertebrate localities have been recorded near the project site (McLeod 2019). The closest vertebrate fossil locality, LACM (CIT) 139, is located west of the southernmost portion of the pipeline alignment in the shoreline cliffs of the city of Carpinteria. This locality, representing an asphalt deposit similar to the well-known La Brea Tar Pits, has yielded several fossil specimens of crow, extinct lion, skunk, weasel, fox, dire wolf, saber-toothed cat, pocket mouse, pocket gopher, and bison.

The proposed pipeline alignment is underlain by five geologic units (Figure 7), three of which, Pleistocene-aged alluvial deposits, Pleistocene-aged paralic deposits, and the Casitas Formation, have high paleontological sensitivity. Excavations for the proposed pipeline would reach up to five feet below the surface. Therefore, construction of the proposed pipeline alignment has the potential to significantly impact paleontological resources.

The proposed site of BPS-A is underlain by Holocene-aged undivided alluvial deposits (Figure 7), which have low paleontological sensitivity. Therefore, construction of BPS-A is unlikely to significantly impact paleontological resources.

The proposed site of BPS-B is underlain by two geologic units, Holocene-aged undivided alluvial deposits and the Sespe Formation (Figure 8). The Sespe Formation has high paleontological sensitivity. Ground-disturbing construction activities associated with BPS-B include site grading and excavations for underground piping. Ground disturbance in areas of the site of BPS-B mapped as the Sespe Formation could result in significant impacts to paleontological resources.

The proposed project also involves improvements to existing Casitas infrastructure. These activities include modifications to the existing Rincon Chlorination Station, Rincon Vents, and Rincon Pumping Plant facilities (Figure 9) and upgrades to the existing Rincon Main Pipeline. These construction activities would occur aboveground or only involve excavations of previously disturbed sediments since they would affect pre-existing infrastructure. Therefore, the various improvements to existing Casitas infrastructure would be unlikely to result in significant impacts to paleontological resources.

Implementation of Mitigation Measure GEO-1 during project construction would reduce the potential impact to paleontological resources to a less-than-significant level.

Mitigation Measure

GEO-1 Paleontological Resources Monitoring

Prior to the commencement of project construction, a Qualified Professional Paleontologist, as defined by the SVP (2010), shall be retained to conduct paleontological monitoring during ground-disturbing activities (i.e., grading, excavation, and trenching) of previously undisturbed geologic units determined to have a high paleontological sensitivity (i.e., Casitas Formation [Qca], Sespe Formation [Ts], Pleistocene-aged alluvial deposits [Qoa], and Pleistocene-aged paralic deposits [Qppr-p]).

Prior to the start of construction, the Qualified Professional Paleontologist or their designee shall conduct a paleontological WEAP training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff.

Ground-disturbing activities on previously undisturbed areas within the project site shall be monitored on a full-time basis. Monitoring shall be supervised by the Qualified Professional Paleontologist and conducted by a qualified paleontological monitor, as defined by the SVP (2010).

The duration and timing of the monitoring shall be determined by the Qualified Professional Paleontologist. If the Qualified Professional Paleontologist determines full-time monitoring is no longer warranted, they may recommend reducing monitoring to periodic spot-checking or ceasing monitoring entirely. Monitoring shall be reinstated if any new ground disturbances of previously undisturbed areas are required, and reduction or suspension shall be reconsidered by the Qualified Professional Paleontologist at the time.

If a paleontological resource is discovered, the monitor shall have the authority to temporarily divert construction equipment around the find until it is assessed for scientific significance and collected. Once salvaged, significant fossils shall be prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection. Curation fees shall be the responsibility of the project owner.

A final report shall be prepared describing the results of the paleontological monitoring efforts associated with the project. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. The report shall be submitted to Casitas. If the monitoring efforts produced fossils, a copy of the report shall also be submitted to the designated museum repository.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	■	☐
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	■	☐

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of greenhouse gas (GHG) emissions contributing to the "greenhouse effect," a natural occurrence which takes place in Earth's atmosphere and helps regulate the temperature of the planet. The majority of radiation from the sun hits Earth's surface and warms it. The surface, in turn, radiates heat back towards the atmosphere in the form of infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions.

GHG emissions occur both naturally and as a result of human activities, such as fossil fuel burning, decomposition of landfill wastes, raising livestock, deforestation, and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO_2), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO_2e), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater than CO_2 on a molecule per molecule basis (Intergovernmental Panel on Climate Change [IPCC] 2021).[5]

The United Nations IPCC expressed the rise and continued growth of atmospheric CO_2 concentrations is unequivocally due to human activities in the IPCC's Sixth Assessment Report (2021). Human influence has warmed the atmosphere, ocean, and land, which has led the climate to warm at an unprecedented rate in the last 2,000 years. It is estimated between the period of 1850 through 2019, a total of 2,390 gigatonnes of anthropogenic CO_2 was emitted. It is likely

[5] The Intergovernmental Panel on Climate Change's (2021) *Sixth Assessment Report* determined that methane has a GWP of 30. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change's (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a GWP of 25.

anthropogenic activities have increased the global surface temperature by approximately 1.07 degrees Celsius between the years 2010 through 2019 (IPCC 2021). Furthermore, since the late 1700s, estimated concentrations of CO_2, methane, and nitrous oxide in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent, respectively, primarily due to human activity (USEPA 2021). Emissions resulting from human activities are thereby contributing to an average increase in Earth's temperature. Potential climate change impacts in California may include loss of snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (State of California 2018).

Regulatory Framework

In response to climate change, California implemented Assembly Bill (AB) 32, the "California Global Warming Solutions Act of 2006." AB 32 required the reduction of statewide GHG emissions to 1990 emissions levels (essentially a 15 percent reduction below 2005 emission levels) by 2020 and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. On September 8, 2016, the Governor signed Senate Bill 32 into law, extending AB 32 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, the California Air Resources Board (CARB) adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program and the Low Carbon Fuel Standard, and implementation of recently adopted policies and legislation, such as SB 1383 (aimed at reducing short-lived climate pollutants including methane, hydrofluorocarbon gases, and anthropogenic black carbon) and SB 100 (discussed further below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) of CO_2e by 2030 and two MT of CO_2e by 2050 (CARB 2017).

Other relevant state laws and regulations include SB 100, which was adopted on September 10, 2018. SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state's Renewables Portfolio Standard Program. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

In 2020, the County of Ventura developed an integrated approach to addressing climate change in the 2040 General Plan by incorporating related policies and programs throughout the General Plan elements, so the General Plan will also serve as the County's Climate Action Plan (CAP). In 2015, the County of Santa Barbara published its Energy and Climate Action Plan (ECAP). The ECAP commits the County to reducing community-wide GHG emissions by 15 percent below 2007 levels by 2020 consistent with the California Global Warming Solutions Act of 2006 (AB 32) and the original Scoping Plan (CARB 2008). The ECAP identified 53 emission reduction measures (ERMs) which would enable the County to meet the GHG reduction target of 15 percent below baseline (2007) levels by 2020, consistent with AB 32.

Methodology

GHG emissions associated with project construction and operation were estimated using CalEEMod, version 2020.4.0, with the assumptions described under Section 3, *Air Quality*. Construction emissions occur for a limited period of a project's lifetime; as a standard practice, GHG emissions from construction are amortized over a presumed project lifetime. A project lifetime of 30 years is recommended by the Association of Environmental Professionals (2016).

Significance Thresholds

The majority of individual projects do not generate sufficient GHG emissions to influence climate change directly. Physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines Section 15064[h][1]).

According to the State CEQA Guidelines, projects can tier from a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. This approach is considered by the Association of Environmental Professionals (2016) in its white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project's GHG emissions. Neither Casitas nor CVWD currently have a formal CAP or GHG reduction plan.

The Santa Barbara County ECAP is not qualified to streamline development projects with a horizon year post-2020 because it does not outline a discrete pathway to achieving the 2030 GHG emission reduction target established by SB 32 or the 2045 target established by EO B-55-18.

The ECAP does not include quantitative significance thresholds for land use projects. Instead, it outlines a programmatic approach to reviewing new development. Any project-specific environmental document which relies on the ECAP for its cumulative impacts analysis must identify specific ERMs applicable to the project and demonstrate the project's incorporation of the measures. In addition, Appendix F of the ECAP includes a checklist to assist project applicants and County staff in determining whether a project considered in the County's 2020 and 2035 GHG emissions forecasts is within substantial compliance with the ECAP. The County's GHG emissions forecasts were based on growth estimates contained in the Santa Barbara County Association of Governments' 2007 Regional Growth Forecast (County of Santa Barbara 2015b). The County of Ventura has developed an integrated approach to address climate change in the Ventura County 2040 General Plan, which serves as the County's Climate Action Plan (CAP). The 2040 General Plan is a qualified GHG emissions reduction plan which could allow for the cumulative impacts analysis of GHG emissions for future projects in the county to tier from the GHG analysis contained in the 2040 General Plan Draft EIR. However, the 2040 General Plan does not establish a quantitative significance threshold for evaluating GHG emissions in CEQA analyses. The 2040 General Plan Draft EIR includes descriptions of GHG emissions thresholds used in the region, and states the VCAPCD's preference is for GHG threshold consistency with South Coast Air Quality Management District and the SCAG Region (VCAPCD 2020). SCAQMD GHG thresholds include an industrial threshold of 10,000 MT of CO_2e (SCAQMD 2019).

CEQA Guidelines Section 15064.4 expressly provides a "lead agency shall have discretion to determine, in the context of a particular project," whether to "[u]se a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use." As lead agency, Casitas has discretion to determine its own methodology for evaluating GHG emissions. Casitas also has discretion under the CEQA Guidelines to "[r]ely on a qualitative analysis or [quantitative] performance based standards."

Therefore, the SCAQMD's 10,000 MT of CO_2e per year threshold for industrial projects is utilized in this analysis as the applicable project-specific threshold. In addition, the proposed project is assessed for consistency with the County of Ventura 2040 General Plan, County of Santa Barbara ECAP, and 2017 Scoping Plan.

a. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Project construction would generate GHG emissions from the operation of heavy machinery for pipeline, booster pump station, and infrastructure improvements construction, as well as equipment and materials haul truck trips and construction worker trips to and from the project site. Construction GHG emissions were estimated using CalEEMod version 2020.4.0 and a conservative, "worst-case" scenario assumption for construction activities. The construction-related GHG emissions for one year were estimated by aggregating all annual pipeline, booster pump station, and infrastructure improvements construction emissions. Table 7 shows the breakdown of annual GHG emissions anticipated to result from construction of the proposed project. The Association of Environmental Professionals recommends GHG emissions from construction be amortized over 30 years and added to operational GHG emissions to determine the overall impact of a project.

For purposes of this Initial Study, it is conservatively estimated operation of the proposed project would occur for approximately 680 hours per year. Under these conditions, the booster pump stations would require 662,200 kWh of electricity annually. The water treatment equipment at BPS-A would require an additional 2,200 kWh of electricity annually under the same conditions. Operation of the project would generate an estimated 50 maintenance vehicle trips per year, resulting in negligible annual mobile GHG emissions. This analysis also accounts for annual operation of the emergency diesel generators at each booster pump station. Table 7 shows the breakdown of annual GHG emissions.

Table 7 Estimated Project-Specific Annual GHG Emissions

Activity	Emissions (MT CO_2e per year)
Construction Emissions	
Pipeline	470
Temporary Booster Pump Station A	1
Booster Pump Station A	359
Booster Pump Station B & Rincon Main Improvements	387
Total Construction Emissions	*1,216*
Amortized Construction Emissions (over 30 years)	**41**
Operational Emissions	
Annual Pump Station Operation	166
Annual Maintenance Vehicle Trips	0.1
Total Operational Emissions	**166**
Total Annual Emissions[1]	**207**
County of Ventura Recommended Threshold	10,000
Threshold Exceeded?	**No**

Both the proposed project's total annual construction emissions (1,216 MT CO_2e) and amortized annual construction emissions (41 MT CO_2e) fall below the VCAPCD recommended significance threshold of 10,000 MT CO_2e per year when combined with the project's annual operational emissions of 207 MT CO_2e. Therefore, impacts related to GHG emissions would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As previously discussed, the County of Ventura 2040 General Plan serves as the County's CAP. Appendix B, Climate Change, of the 2040 General Plan identifies policies to promote water efficiency, resiliency, and conservation applicable to the proposed project, such as Policy PFS-2.3, *Energy Efficient Facility Construction, Purchases, Leases, Retrofits, and Expansions*, and Policy WR-C, *Regional Collaboration on Water Issues and Sustainability*. Of the 53 ERMs identified in the County of Santa Barbara's ECAP (2015b), three pertain to water efficiency. The ECAP sets a goal to "maximize the reliability of local water resources and supplies through water use efficiency." While the proposed project would not specifically involve water efficiency, it would improve the reliability and resiliency of the local water supply system. Therefore, the project would be consistent with the County of Ventura's 2040 General Plan and County of Santa Barbara's ECAP.

This analysis also evaluates the proposed project against the goals of the 2017 Scoping Plan (CARB 2017b). Approximately two percent of total energy usage in California is used for the conveyance, treatment, and distribution of water. One of the goals of the 2017 Scoping Plan is to "develop and support more reliable water supplies for people, agriculture, and the environment, provided by a more resilient, diversified, sustainably managed water resources system with a focus on actions that provide direct GHG reductions" (CARB 2017b).

The proposed project would facilitate the transfer of water between Casitas and CVWD, thereby improving the reliability and resiliency of the local water distribution network and diversifying the local water supply portfolio. Furthermore, the ability to transfer water supplies between the agencies would facilitate access to Casitas' State Water Project (SWP) 5,000 acre-foot per year Table A allocation and Article 21 water for use or storage, as needed, which would reduce reliance on groundwater, particularly during drought periods. The SWP supplies water to 29 public water agencies across California through a network of canals, pipelines, tunnels, and reservoirs. Long-term contracts between SWP and water agencies detail agreements on the maximum amount of water a contractor may request annually, although actual water delivery may vary per year, depending on available water supply, hydrologic conditions, reservoir storage, and total amount of water requested by SWP water contractors. SWP water is used to supplement local or imported water supplies, and occasionally for agricultural purposes (California Department of Water Resources [DWR] 2019a).

When an agency has a surplus of water due to favorable weather or reduced consumption, DWR encourages and facilitates the transfer of water using SWP conveyance facilities to other agencies to help them meet water supply needs. State law requires DWR to make unused SWP water allocations available for transfers upon payment of fair compensation, provided no legal user of water will be injured; there will be no unreasonable effect on fish, wildlife, or other instream beneficial uses; and there will be no unreasonable effect on the overall economy or the environment of the county from which the water is being transferred (California Water Code Section 1810). Water transfers can involve transfers and exchanges among SWP long-term water contractors, between SWP water contractors and non-SWP entities, or between two or more non-SWP entities. Hundreds of water transfers occur annually in California, ensuring all available SWP water is consistently used (DWR 2019b).

Casitas has sold its annual allocation of SWP to the DWR's Turnback Pool from 1995 through 2018. In 2018, 2019 and 2020, Casitas did "bonafide exchanges" with San Gorgonio Pass Water Agency. The amount of water exchanged varied year to year, wherein 100 percent of Casitas' 2017 allocation was exchanged in 2018, 13 percent was exchanged in 2019, and 100 percent was exchanged in 2020. San Gorgonio Pass Water Agency serves the cities of Calimesa, Beaumont, and Banning, all located in Riverside County. Casitas retained the remainder of its 2019 allocation in San Luis Reservoir for possible delivery in a future year which occurred within the United Water Conservation District in 2021. The United Water Conservation District provides surface water capture and groundwater replenishment services to various communities in northern Ventura County. In 2021 and 2022, Casitas transferred its annual allocation to the Central Coast Water Authority (CCWA) located in Santa Barbara County. The CCWA is a public entity organized under a joint exercise of powers agreement by cities and special districts to construct, operate, and maintain local facilities in Santa Barbara County for distribution and treatment of SWP water. Transportation of SWP water to San Gorgonio Pass Water Agency, United Water Conservation District, and Central Coast Water Authority facilities necessitates usage of existing SWP facilities.

The use of SWP facilities to transfer water to the various water agencies utilizing SWP water throughout the state is currently occurring. The DWR has a Climate Action Plan, which serves as a guide to address climate change in the programs, projects, and activities over which the DWR has authority, including the SWP (DWR 2019c). As such, GHG emissions related to SWP water transfers would occur regardless of whether Casitas uses/stores its allotted 5,000 acre-feet annually or sells its allotment, and the project would not a generate a significant amount of GHG emissions.

Therefore, although the project would generate temporary construction and minimal operational emissions, the project would ultimately be consistent with the goals of CARB's 2017 Scoping Plan.

The proposed project would not be in conflict with any applicable plans, policies, or regulations for the purpose of reducing GHG emissions. Therefore, impacts related to GHG emissions would be less than significant.

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9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	■	☐	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	■	☐	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	☐	■
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	■	☐	☐
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	■
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	■	☐	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	■	☐

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Construction of the proposed project would temporarily increase the transport and use of hazardous materials during the use of construction vehicles and equipment. Construction activities could cause an upset or accident condition. If such conditions result in a release of hazardous materials into the environment, potential impacts could occur. Limited quantities of miscellaneous hazardous substances, such as diesel fuel, oil, solvents, and other similar materials, would be brought onto the project site, used, and stored during the construction period. These materials would be disposed off-site in accordance with applicable laws pertaining to the handling and disposal of hazardous waste.

The transport, use, and storage of hazardous materials during construction would be conducted in accordance with applicable federal and State laws, such as the Hazardous Materials Transportation Act, California Hazardous Material Management Act, and California Code of Regulations, Title 22. Additionally, project components constructed within Ventura County would be required to comply with VCACPD Rule 62.1 (Hazardous Materials), which mandates no hazardous materials shall be discharged from any source so as to result in concentrations at or beyond the property line in excess of established federal, State, or local standards or emission limits. In the absence of specific standards for a particular hazardous material, the airborne concentrations of such materials shall not exceed those levels and time intervals established by the State Division of Industrial Safety or Occupational Safety and Health Administration. Compliance with Rule 62.1 would restrict hazardous materials emissions from the project site. Furthermore, pursuant to Mitigation Measure BIO-6, the construction materials would be stored on impervious surfaces or plastic ground covers at least 50 feet from potential jurisdictional aquatic features. Such storage areas would be protected from stormwater runoff using temporary perimeter sediment barriers. These measures would further reduce the potential for hazardous materials emissions to migrate from the project site. Therefore, construction activities would not pose a significant hazard to the public or to the environment either through routine use or reasonably foreseeable upset and accident conditions.

Once constructed, the proposed pipeline and infrastructure improvements to existing Casitas facilities would not involve routine transport, use, or disposal of hazardous materials, as these facilities would convey potable water. Proposed BPS-A would include chemical storage associated with water treatment. Specifically, BPS-A would house a 500-gallon ammonia (19 percent aqueous ammonia) storage tank and feed pump skid, an outdoor 3,500-gallon, 12.5 percent sodium hypochlorite vertical storage tank and feed pump, and a 170,000-gallon bolted steel baffled chemical contact tank. Use of such chemicals, which are typical of potable water disinfection systems, would be subject to applicable federal, State, and local laws pertaining to transport, storage, use, or disposal of hazardous materials. The ammonia storage tank would be housed in a dedicated ammonia room, while the sodium hypochlorite tank would be housed under a shade structure and equipped with secondary chemical containment, minimizing the potential for leaks, spills, and/or runoff to occur. Water treatment facilities, including chemical storage, are not proposed at BPS-B.

Project operation would not create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials. Project construction activities

would comply with all relevant regulations, including the enforcement of hazardous materials treatment, handling, notification, and transportation regulations and implementation of BMPs. Nonetheless, upset or accident conditions could result in the unanticipated spill or release of hazardous materials such as vehicle and equipment fuels, potentially introducing a hazard to the public and/or the environment, which could result in a potentially significant impact.

With implementation of Mitigation Measure BIO-6 and Mitigation Measure HAZ-1 to provide an additional level of safety, the potential impact would be reduced to a less-than-significant level.

Mitigation Measure

HAZ-1 Hazardous Materials Management and Spill Control Plan

Before construction begins, the construction contractor shall submit to Casitas for review and approval a Hazardous Materials Management and Spill Control Plan (HMMSCP), including a project-specific contingency plan for hazardous materials and waste operations. The HMMSCP shall establish policies and procedures consistent with applicable codes and regulations, including, but not limited to, the California Building and Fire Codes, as well United States Department of Labor, United States Occupational Safety and Health Administration, and California Occupational Safety and Health Administration regulations. The HMMSCP shall articulate hazardous materials handling practices to prevent the accidental spill or release of hazardous materials.

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c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

The nearest school to the project site is Cate School, which is located approximately 0.9-mile northwest of the project site in Carpinteria. As previously described in items (a) and (b), there is potential for an accidental spill or release of hazardous or potentially hazardous materials, such as vehicle and equipment fuels, to occur during project construction. However, the project site is not within 0.25 mile of an existing or proposed school. Project construction would not involve substantial airborne emissions of hazardous materials, and any vehicle and equipment fuels accidentally released on the project site would be unlikely to travel over 0.9 mile over ground or via waterways to impact the Cate School. Therefore, project construction would not adversely impact schools due to the handling of hazardous materials.

In addition, as previously discussed in items (a) and (b), project operation would involve use and storage of chemicals associated with water disinfection, including ammonia and sodium hypochlorite. Such chemicals would be typical of potable water treatment facilities, stored in secondary containment systems, and not located within 0.25 mile of a school. Therefore, the project would not emit hazardous emissions or handle hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. No impact would occur.

NO IMPACT

d. Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Government Code Section 65962.5 requires the California Environmental Protection Agency to develop an updated Cortese List. The California Department of Toxic Substance Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List (DTSC 2019). The analysis for this section included a review of the following resources on August 29, 2022 to provide hazardous material release information: (1) State Water Resources Control Board (SWRCB 2022) GeoTracker database and (2) DTSC (2022) EnviroStor database.

Based on review of these databases, it was determined the pipeline alignment, booster pump station location sites, and infrastructure improvement sites are not included on existing lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Approximately 16 sites within 0.25 mile of the proposed pipeline alignment and pump station locations are enrolled in the SWRCB's Irrigated Lands Regulatory Program (ILRP; SWRCB 2019a). The ILRP regulates discharges associated with commercial agricultural operations to reduce potential impacts to waterbodies. The program covers approximately 40,000 growers and six million acres throughout California and requires monitoring and reporting of agricultural inputs, including fertilizers and pesticides (SWRCB 2019a).

The project would primarily be constructed within existing public and private road rights-of-way. However, portions of the project would be constructed on or adjacent to existing agricultural land. Given the current and/or historical agricultural use of portions of the project site, hazardous materials such as pesticides may be present in the soils underlying the project site and could be encountered during ground-disturbing construction activities. Such materials could pose a threat to construction workers, the public, or the environment if not properly managed, transported, or disposed, which could result in potentially significant impacts.

With implementation of Mitigation Measures HAZ-2 and HAZ-3, which require a soil assessment and a Contaminated Soil Contingency Plan for proper disposal of contaminated soils, if identified, the potential impact would be reduced to a less-than-significant level.

Mitigation Measures

HAZ-2 Soil Sampling and Disposal

Prior to construction, a soil assessment shall be completed under the supervision of a professional geologist or professional engineer. If soil sampling indicates the presence of any contaminant in quantities not in compliance with applicable laws, the Regional Water Quality Control Board (RWQCB) or DTSC shall be contacted to determine proper disposal requirements. If required based on the levels of contamination in the project site soil, proper removal and disposal of contaminated soils removed during excavation and trenching activities shall be performed.

HAZ-3 Contaminated Soil Contingency Plan

The contractor shall develop and implement a Contaminated Soil Contingency Plan to handle treatment and/or disposal of contaminated soils. If contaminated soil is encountered during project construction, work shall halt, and an assessment made to determine the extent of contamination.

Treatment and/or disposal of contaminated soils shall be conducted in accordance with the Contingency Plan.

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e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The closest public airport to the project is the Santa Barbara Airport, located approximately 20 miles west of the project site. Therefore, the project would not be located in an area covered by an airport land use plan and within two miles of a public or public-use airport. No impact would occur.

NO IMPACT

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Construction activities associated with the project may temporarily impede emergency response along SR 150 and/or SR 192. While full road closures are not anticipated, temporary and intermittent lane closures may be necessary during pipeline installation within roadways.

Mitigation Measure T-1 in Section 17, *Transportation*, which requires preparation and execution of a project-specific Traffic Management Plan, would identify emergency access routes and detours and describe procedures in place to provide priority access for emergency service vehicles through the construction work zone, minimizing potential interference with emergency response in the project site vicinity. Furthermore, Mitigation Measure T-2 requires the construction contractor to notify all emergency service providers serving the project site with construction contact names, locations, schedules, and traffic plans, if applicable, prior to the start of construction. With adherence to these mitigation measures, the impact would be reduced to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

As discussed in Section 20, *Wildfire*, the project site is in a State Responsibility Area (SRA) designated as a moderate to very high fire hazard severity zone (California Department of Forestry and Fire Protection [CALFIRE] 2007a, 2007b, 2008, 2010). Project construction would involve the use of heavy equipment in a vegetated hillside area, which could potentially result in sparks which could ignite surrounding vegetation. The project would be required to comply with applicable regulations relating to construction in vegetated and forested landscapes, including mandatory use of spark arrestors (PRC Section 4442), maintenance of fire suppression equipment during the highest fire danger period (PRC Section 4428), and adherence to standards for conducting construction activities on days when a burning permit is required (PRC Sections 4427 and 4431). With adherence to these regulatory requirements, construction-related wildfire risks would be less than significant.

The project involves a water pipeline, booster pump stations, and infrastructure improvements at existing Casitas facilities. None of these proposed components would pose a substantial risk of wildfire ignition once operational. Potable water pipelines would be located underground, and electrical equipment associated with booster pump stations would be contained in weatherproof structures, minimizing the potential for such equipment to ignite nearby vegetation. The project

would not include housing or other structures which could accommodate occupants, and therefore, would not house occupants which could potentially be exposed to risk of loss, injury, or death involving wildland fires. Impact would be less than significant. For additional discussion of potential impacts related to wildfires, refer to Section 20, *Wildfire.*

LESS THAN SIGNIFICANT IMPACT

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	■	☐	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	■	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	☐	☐	■	☐
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	■	☐
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	■	☐
(iv) Impede or redirect flood flows?	☐	☐	■	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	■	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	■	☐

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Excavation, grading, and construction activities associated with project construction would result in soil disturbance. Stormwater flowing through a construction site can collect sediment, debris, and chemicals, and transport them to receiving water bodies. Receiving water bodies on the project site and in the vicinity include Rincon Creek and the Pacific Ocean. As previously stated, relatively shallow groundwater may be encountered at trench excavation depths (BGI 2019).

As previously discussed in Section 7, *Geology and Soils*, project construction would comply with the requirements of the NPDES Construction General Permit and the applicable General NPDES Permits for Discharges of Groundwater from Construction. The NPDES Construction General Permit requires preparation and implementation of a project-specific SWPPP, which requires operators to implement pollution prevention controls to minimize the discharge of pollutants from stormwater and spilled or leaked materials. Such controls include installation of silt fencing and sandbag barriers, covering of stockpiles, use of desilting basins, and post-construction revegetation and drainage requirements. In addition, project components in Ventura County would be required to implement an effective combination of erosion and sediment control BMPs, such as hydraulic mulch and hydroseeding, spill prevention and control, soil binders, and street sweeping, pursuant to the requirements of the County of Ventura's MS4 Permit. In addition, the General NPDES Permit for Discharges of Groundwater from Construction in coastal watersheds of Ventura County requires compliance with effluent limitations for reportable pollutants, discharge prohibitions, and a project-specific Monitoring and Reporting Program. Project components in Santa Barbara County would be subject to erosion control requirements under the County of Santa Barbara's Phase II MS4 Permit, as implemented by the County's Grading Ordinance in Chapter 14 of the County's Code of Ordinances, and the effluent limitations and a project-specific Monitoring and Reporting Program required by the RWQCB Central Coast Region's *Waste Discharge Requirements NPDES General Permit for Discharges of Highly Treated Groundwater to Surface Waters*. Compliance with applicable erosion and sediment control permitting and regulatory requirements would minimize potential surface water quality impacts associated with project construction and compliance with applicable effluent limitations for reportable pollutants, discharge prohibitions, and a project-specific Monitoring and Reporting Program for groundwater discharge would minimize potential construction groundwater quality impacts. However, there is potential for accidental leaks and spills of hazardous materials, which could result in potentially significant impacts to water quality.

Mitigation Measure HAZ-1, as described in Section 9, *Hazards and Hazardous Materials*, would reduce the potential for accidental leaks and spills of hazardous materials by requiring preparation and implementation of an HMMSCP. With implementation of Mitigation Measure HAZ-1, project construction would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality, and the impact would be reduced to a less-than-significant level.

During operation of the project, the pipeline, pump stations, and infrastructure improvements would convey potable water. Proposed BPS-A would include water treatment facilities to provide the required secondary disinfectant conversion from one water district's source water to the other. These facilities would include storage and use of chemicals typical of potable water treatment facilities, specifically 19 percent aqueous ammonia and 12.5 percent sodium hypochlorite. Use, transport, handling, and storage of these chemicals would occur in compliance with applicable federal, State, and local regulations. The ammonia storage tank would be housed in a dedicated ammonia room, while sodium hypochlorite would be housed under a shade structure and equipped

with secondary chemical containment, minimizing potential for leaks, spills, or runoff to occur. No water treatment facilities are proposed at BPS-B. Therefore, project operation would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Therefore, no operational impact would occur.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The project would involve construction of a pipeline, pump stations, and infrastructure improvements at existing Casitas facilities to facilitate transfer of potable water between Casitas and CVWD. The proposed pipeline alignment, BPS-A site location, and Rincon Main Pipeline Improvements site location overlie the Carpinteria Groundwater Basin (Basin 3-018). The BPS-B site location and other infrastructure improvement locations do not overlie a designated groundwater basin.

During construction of the project, shallow groundwater may be encountered at trench excavation depths along portions of the proposed pipeline alignments (BGI 2019), as discussed under item (a). The amount of groundwater encountered during construction would not be substantial and the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge so the project may impede sustainable groundwater management of the basin.

In addition, the project would not substantially increase impervious surface cover, which could inhibit groundwater recharge, as the majority of the project would be constructed in existing public and private road rights-of-way. Moreover, the project would not increase the amount of water currently being supplied to existing customers or provide water to areas currently not serviced by Casitas or CVWD. As such, the project would not involve acquisition of new water supplies or additional groundwater extraction.

As discussed under item (e) below, the project would not conflict with any Groundwater Sustainability Plan as no such plan has been adopted for these basins to date. Furthermore, the ability to transfer water supplies between the agencies would facilitate access to Casitas' State Water Project (SWP) 5,000 acre-foot per year Table A allocation and Article 21 water for use or storage, as needed, which would reduce reliance on groundwater, particularly during drought periods. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Construction of the proposed pipeline would not increase the amount of impervious surfaces along the pipeline alignment because the pipeline would be underground and the ground surface would be restored to its existing condition after installation of the pipeline. The proposed pipeline alignment would involve the crossing of Rincon Creek. The creek crossing would be accomplished using trenchless HDD construction. Trenchless HDD construction would not involve substantial alteration to the creek as trenchless HDD construction would occur beneath the creek, thereby avoiding a change in existing drainage patterns of Rincon Creek. As described under item (a) of this section, the project would implement erosion-control BMPs pursuant to requirements of the NPDES Construction General Permit. In addition, the proposed pipeline would not alter the existing drainage pattern along the pipeline alignment as compared to existing conditions, and therefore would not result in substantial on- or off-site erosion or siltation, flooding, or additional sources of polluted runoff.

Construction of the proposed pump stations would add a nominal amount of impervious surface area through the construction of weatherproof structures, approximately 420 square feet in area for each pump station. This marginal increase in impervious surface cover would not substantially alter the booster pump station sites' drainage characteristics or result in excess runoff. There are no existing streams or rivers on the site of the proposed booster pump stations, and these project components would not alter the course of a stream or river. Therefore, the proposed pump stations would not result in substantial on- or off-site erosion or siltation, flooding, or sources of polluted runoff. Impacts related to alteration of the existing drainage pattern on the project site would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps, areas of the project site near Lake Jocelyn and along Rincon Creek are located in a Zone A, indicating an area subject to inundation by the 1-percent-annual-chance flood event (FEMA 2018a, 2018b, 2010a, 2010b). These areas include the eastern portion of the proposed pipeline alignment and the western portion of the BPS-A site.

As previously discussed under items (c[i]) through (c[iii]), the pipeline would be constructed underground and generally within existing public and private road rights-of-way. The crossing of Rincon Creek would be accomplished using trenchless HDD construction. Furthermore, upon completion of pipe installation, the entrance pit and receiving pit would be backfilled and the disturbed land or habitat would be restored. As such, pipeline construction would not alter the drainage pattern of the project site and would not redirect flood flows. Proposed BPS-A would add a marginal amount of impervious surface area (approximately 420 square feet) in and/or near the flood zone due to construction of the weatherproof structure. This increase in impervious area would not substantially affect or redirect flood flows in the approximately 1,000-foot-wide

floodplain, which currently contains numerous houses, ancillary structures, trees, and roadways of similar or larger scale. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

The project site is located approximately 0.75 mile from the Pacific Ocean and is not located within a tsunami inundation zone, according to the California Department of Conservation's Tsunami Inundation Maps for the Pitas Point and White Ledge Peak Quadrangles (California Emergency Management Agency et al. 2009a, 2009b). The nearest inland surface water body to the project site is Lake Casitas, approximately 0.4 mile southwest of the Rincon Vents and approximately 0.4 mile west of the Rincon Pump Plant. While this area may be subject to inundation during a seiche event, the project components located near Lake Casitas involve improvements to existing potable water infrastructure and would not increase the risk of pollutants during such a seiche event.

As previously discussed under item (c[iv]), portions of the project site are located in a flood hazard zone (Zone A), including the proposed pipeline alignment and the BPS-A site. Pipeline segments would be located underground and convey potable water. The proposed project would be designed to meet all applicable floodproofing criteria and standards for development within flood zones. Consequently, the proposed project would be constructed to minimize the risk of inundation in flood hazard zones.

BPS-A would involve use, handling, and storage of chemicals associated with proposed water treatment facilities at the site, including a 500-gallon, 19 percent aqueous ammonia tank and 3,500-gallon, 12.5 percent sodium hypochlorite tank. These facilities would be secured in a dedicated ammonia room and a tank with secondary containment, respectively. In addition, all equipment would be elevated above the flood height. Therefore, these components would not pose a substantial risk of pollutant release during project inundation. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Project components in Ventura County would be under the jurisdiction of RWQCB Region 4 (Los Angeles Region). The RWQCB provides permits for projects potentially affecting surface waters and groundwater locally, and is responsible for preparing the Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (also termed the Basin Plan). Similarly, project components in Santa Barbara County would be under the jurisdiction of RWQCB Region 3 (Central Coast), which is responsible for preparing the Water Quality Control Plan for the Central Coast Basin. The Basin Plans designate beneficial uses of water in the regions and establish narrative and numerical water quality objectives. The State has developed total maximum daily loads (also called TMDLs), which are a calculation of the maximum amount of a pollutant a water body can have and still meet water quality objectives established by the region. In the project area, Rincon Creek does not meet water quality objectives for its designated beneficial uses and is listed as impaired for boron, chloride, *Escherichia coli* (*E. coli*), fecal coliform, nitrate, dissolved oxygen, sodium, and toxicity. Downstream, Rincon Beach is listed as impaired for indicator bacteria (SWRCB 2019b).

In addition, as previously discussed under item (a), construction activities would have the potential to degrade surface water quality in receiving waterbodies due to ground disturbance and mobilization of sediment and sediment-bound pollutants. Implementation of erosion and sediment control BMPs as required pursuant to the NPDES Construction General Permit and applicable MS4 Permits would reduce the potential for construction activities to exacerbate existing surface water quality impairments. Operation of a potable water pipeline and other related infrastructure improvements would not be associated with discharge of contaminants with the potential to exacerbate existing surface water quality impairments. Project operation would involve use, handling, and storage of disinfectant chemicals, including ammonia and sodium hypochlorite, at BPS-A. Such storage would occur in either a weatherproof structure or tanks equipped with secondary containment to reduce the potential for chemical spills, leaks, or runoff. Therefore, the project would not conflict with or obstruct implementation of applicable water quality control plans, and impacts would be less than significant.

As previously discussed under item (b), the proposed pipeline alignment and BPS-A would overlie the Carpinteria Groundwater Basin (Basin 3-018). As part of its 2018 basin re-prioritization process, the DWR designated the Carpinteria Basin as high priority, and therefore, the basin is required to develop and implement a Groundwater Sustainability Plan under the Sustainable Groundwater Management Act (CVWD n.d.). To date, no Groundwater Sustainability Plan has been adopted for the Carpinteria Basin. The project would involve construction and operation of potable water infrastructure to facilitate the transfer of water between Casitas and CVWD. During construction of the project, shallow groundwater may be encountered at trench excavation depths along portions of the proposed pipeline alignment (BGI 2019), as discussed above under item (a). Compliance with effluent limitations for reportable pollutants, discharge prohibitions, and a project-specific Monitoring and Reporting Program for groundwater discharge as required by the applicable General NPDES Permits for Discharges of Groundwater from Construction (NPDES Permit No. CAG994004 for Ventura County and NPDES Permit No. CAG993002 for Santa Barbara County) would minimize potential construction groundwater quality impacts. The project would not increase groundwater extraction or impede groundwater recharge. As previously discussed under item (b) of this section, transfers of water supply between Casitas and CVWD may result in movement of groundwater between source basins for each of these water purveyors. However, the project would not obstruct implementation of a Groundwater Sustainability Plan for any of these basins, as no such plan has been adopted to date. Furthermore, transfers between Casitas and CVWD would allow for access to and storage of Casitas' SWP allocation, reducing dependence on regional groundwater supplies during times of drought. As previously discussed, the proposed project is identified as a recommended supply portfolio option in the DRAFT CWRP. As such, this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	■
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	■	☐	☐

a. Would the project physically divide an established community?

Once constructed, project facilities would consist of approximately 7,100 LF of new underground pipeline, two new booster pump stations, and improvements to existing Casitas facilities, which would not have the potential to physically divide an established community. The project includes improvements to potable water infrastructure in a primarily rural residential and agricultural area. The presence of construction-related equipment and workers would temporarily change the existing character of the vicinity to a construction zone. Construction activities within public and private roadways would maintain local access for businesses and residences along the proposed alignment to the extent practicable throughout short-term construction of the project. Therefore, the project would not displace or divide an established community, and no impact would occur.

NO IMPACT

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

One of the objectives of the project is to improve water supply reliability and resiliency by facilitating transfer of water between Casitas and CVWD. As previously stated, the proposed project would not be utilized to increase the amount of water currently being supplied to existing customers or to provide water to areas currently not serviced by Casitas or CVMD.

The project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project. The County of Ventura's 2040 General Plan identifies goals and policies to maintain adequate water supplies and quality in the county. The proposed project would be consistent with the following goals and policies (County of Ventura 2020b):

- **Water Resources Policy 1.** To effectively manage water supply by adequately planning for the development, conservation, and protection of water resources for present and future generations.
- **Water Resources Goal 1.1: Sustainable Water Supply.** The County should encourage water suppliers, groundwater management agencies, and groundwater sustainability agencies to

inventory and monitor the quantity and quality of the county's water resources, and to identify and implement measures to ensure a sustainable water supply to serve all existing and future residents, businesses, agriculture, government, and the environment.

- **Water Resources Goal 1.3: Portfolio of Water Sources.** The County shall support the use of, conveyance of, and seek to secure water from varied sources that contribute to a diverse water supply portfolio. The water supply portfolio may include, but is not limited to, imported water, surface water, groundwater, treated brackish groundwater, desalinated seawater, recycled water, and stormwater where economically feasible and protective of the environmental and public health.
- **Water Resources Goal 1.4: State Water Sources.** The County shall continue to support the conveyance of, and seek to secure water from, state sources.
- **Water Resources Goal 1.7: Water Supply Inter-Ties.** The County shall encourage the continued cooperation among water suppliers in the county, through entities such as Association of Water Agencies of Ventura County and the Watersheds Coalition of Ventura County, to establish and maintain emergency inter-tie projects among water suppliers

In addition to the Ventura County 2040 General Plan, portions of the project components proposed in Ventura County are located within the County's North Coast zone, and therefore, may be subject to the County's Local Coastal Program. The Ventura County Coastal Area Plan includes the following policy for the North Coast zone (County of Ventura 2017b):

- **Public Works Policy 1.** New or expanded public works facilities (including roads, flood control measures, water and sanitation) will be designed to serve the potential population within the subarea's boundaries, and to mitigate impacts on agricultural, open space lands, or environmentally sensitive habitats.

As noted throughout this document, the project would result in no impact, less than significant impacts, or less than significant impacts with the incorporation of mitigation measures for all issue areas evaluated, including agricultural resources, recreation, and biological resources. As such, the project would be consistent with this policy of the Ventura County Coastal Area Plan.

The Santa Barbara County Comprehensive Plan Conservation Element, Groundwater Resources Section contains the following goals and actions with which the project would be consistent (County of Santa Barbara 2009a):

- **Goal 3:** To coordinate County land use planning decisions and water resources planning and supply availability.
    - **Action 3.4.4**: Santa Barbara County shall encourage and assist local water purveyors in developing adequate water supplies (groundwater, surface water, desalination, etc.) to serve their customers and communities consistent with the applicable general plan(s).

Additionally, the Conservation Element identifies various regional water supply alternatives to be combined to meet future countywide water demand (County of Santa Barbara 2010). These sources include water imports, including State Water Project water via neighboring counties, and conjunctive use of surface and groundwater supplies. The project would be consistent with these strategies by facilitating water transfers between Casitas and CVWD, improving supply reliability and management flexibility for water service providers in Ventura and Santa Barbara counties.

Project components proposed in Santa Barbara County would also be located in the coastal zone, and therefore, may be subject to the Santa Barbara County Coastal Land Use Plan and Local Coastal Program. Policies 3-13 and 3-14 require: minimum cut and fill operations; development be designed to fit existing topography, soils, geology, hydrology, and other existing conditions; and areas not suited for development because of known soil, geologic, flood, erosion, or other hazards to remain open space. The project would require cut and fill during open-cut trenching, trenchless HDD, grading, and other ground-disturbing activities. However, project activities would not result in an excess cut or fill beyond what would be required for the project. As discussed under Section 7, *Geology and Soils*, all project components would be required to implement BMPs to control erosion hazards. Construction of the project would occur in compliance with the CBC, which would minimize the risk of potential geologic hazards. Furthermore, construction would comply with all applicable standards of construction in flood hazard zones. Consequently, adverse effects due to any potential flooding would be minimized. As a result, the project would be consistent with Policies 3-13 and 3-14 of the Santa Barbara County Coastal Land Use Plan and Local Coastal Program.

Coastal Act Policy 30240(b) mandates development in areas adjacent to environmentally sensitive habitat areas and park and recreation areas be sited and designed to prevent polluted runoff impacts. As discussed in Section 4, *Biological Resources,* Mitigation Measures BIO-1, BIO-6, and BIO-7 mandate construction personnel undergo WEAP training, implementation of BMPs to limit polluted stormwater runoff, and development of an HMMP. These mitigation measures would limit polluted runoff into environmentally sensitive habitat areas and require compensatory mitigation if impacts to environmentally sensitive habitat areas occur. Therefore, with implementation of Mitigation Measures BIO-1, BIO-6, and BIO-7, the proposed project would comply with Coastal Act Policy 30240(b).

Pursuant to Section 35-146 of the Santa Barbara County Coastal Zoning Ordinance, small scale public works, utilities, and private service facilities are permitted in all zone districts, subject to approval of a Coastal Development Permit and Conditional Use Permit, as applicable. This includes distribution and collection lines for water, reclaimed water, and wastewater (County of Santa Barbara 2019b). Because potable water pipelines proposed under the project are permitted in all zones, the project would not conflict with the Santa Barbara County Coastal Zoning Ordinance.

As discussed in Section 2, *Agriculture and Forestry Resources*, public works facilities are permitted on land zoned as Coastal Agriculture (CA) pursuant to the Ventura County Coastal Zoning Ordinance (Division 8, Chapter 1.1). Pursuant to the Ventura County Non-Coastal Zoning Ordinance (Division 8, Chapter 1), "efficient municipal services and facilities" are "promoted" on land zoned as Agriculture Exclusive (AE) and Open Space (OS). In addition, the Ventura County Non-Coastal Zoning Ordinance allows development which would result in public health and safety improvements, including in high fire risk areas. The project would improve regional water supply reliability for areas in Ventura and Santa Barbara counties susceptible to natural disasters such as wildfire. Consequently, the project would be consistent with the provisions of Ventura County Agriculture Exclusive (AE) and Open Space (OS) zoning.

There would be no conflicts with land use plans, policies, or regulations of the County of Ventura or County of Santa Barbara. Implementation of Mitigation Measures BIO-1 and BIO-6 through BIO-8 would ensure the proposed project would be in compliance with Coastal Act Policy 30240(b). Therefore, the project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. This impact would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	■
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	■

a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The proposed project would primarily be constructed in existing roadways and on previously disturbed land. The project site is not located in an area designated by the Santa Barbara County Comprehensive Plan or the Ventura County General Plan as an area with the known potential for mineral resources (County of Santa Barbara 2010; County of Ventura 2020b). The project site is not currently used for mineral resource extraction, nor is it located in an area with the known potential for mineral resources. No impact to mineral resources would occur.

NO IMPACT

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13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	■	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	■	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	■

Noise Overview

The unit of measurement used to describe a noise level is the decibel (dB). However, the human ear is not equally sensitive to all frequencies within the sound spectrum. Therefore, a method called "A weighting" is used to filter noise frequencies which are not audible to the human ear. A-weighting approximates the frequency response of the average young ear when listening to most ordinary everyday sounds. When people make relative judgments of the loudness or annoyance of a sound, their judgments correlate well with the "A-weighted" levels of those sounds. Therefore, the A-weighted noise scale is used for measurements and standards involving the human perception of noise. In this analysis, all noise levels are A-weighted, and "dB(A)" is understood to identify the A-weighted decibel.

Decibels are measured on a logarithmic scale which quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. A 10 dB increase represents a 10-fold increase in sound intensity, a 20 dB change is a 100-fold difference, 30 dB is a 1,000-fold increase, etc. Thus, a doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the energy would result in a 3 dB decrease.

Human perception of noise has no simple correlation with acoustical energy. The perception of noise is not linear in terms of dB(A) or in terms of acoustical energy. Two equivalent noise sources combined do not sound twice as loud as one source. It is widely accepted the average healthy ear

can barely perceive changes of 3 dB(A), increase or decrease; a change of 5 dB(A) is readily perceptible; and an increase (decrease) of 10 dB(A) sounds twice (half) as loud (Caltrans 2013).

Descriptors

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important. In addition, most noise which lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors has been developed. The noise descriptors used for this analysis are the one-hour equivalent noise level (L_{eq}) and the community noise equivalent level (CNEL).

- The L_{eq} is the level of a steady sound, in a stated time period and at a stated location, having the same A-weighted sound energy as the time-varying sound. For example, $L_{eq(1h)}$ is the equivalent noise level over a 1-hour period and $L_{eq(8h)}$ is the equivalent noise level over an 8-hour period. $L_{eq(1h)}$ is a common metric for limiting nuisance noise whereas $L_{eq(8h)}$ is a common metric for evaluating construction noise.
- The CNEL is a 24-hour equivalent sound level. The CNEL calculation applies an additional 5 dB(A) penalty to noise occurring during evening hours, between 7:00 p.m. and 10:00 p.m., and an additional 10 dB(A) penalty is added to noise occurring during the night, between 10:00 p.m. and 7:00 a.m. These increases for certain times are intended to account for the added sensitivity of humans to noise during the evening and night.

Propagation

Sound from a small, localized source (approximating a "point" source) radiates uniformly outward as it travels away from the source in a spherical pattern, known as geometric spreading. The sound level decreases or drops off at a rate of 6 dB(A) for each doubling of the distance. Traffic noise is not a single, stationary point source of sound. Over some time interval, the movement of vehicles makes the source of the sound appear to emanate from a line (line source) rather than a point. The drop-off rate for a line source is 3 dB(A) for each doubling of distance.

The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site (such as parking lots or smooth bodies of water) receives no additional ground attenuation and the changes in noise levels with distance (drop-off rate) are simply the geometric spreading of the source. A soft site (such as soft dirt, grass, or scattered bushes and trees) receives an additional ground attenuation value of 1.5 dB(A) per doubling of distance.

Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain features such as hills and dense woods, and man-made features such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dB(A) reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2017).

Vibration Overview

Vibration levels are usually expressed as single-number measure of vibration magnitude, in terms of velocity or acceleration, which describes the severity of the vibration without the frequency variable. The peak particle velocity (ppv) is defined as the maximum instantaneous positive or negative peak of the vibration signal, usually measured in inches per second. Since it is related to the stresses experienced by buildings, ppv is often used in monitoring and controlling construction

vibration. Although ppv is appropriate for evaluating the potential of building damage, it is not suitable for evaluating human response. It takes some time for the human body to respond to vibrations. In a sense, the human body responds to an average vibration amplitude (FTA 2018). Because vibration waves are oscillatory, the net average of a vibration signal is zero. Thus, the root mean square (rms) amplitude is used to describe the "smoothed" vibration amplitude (FTA 2018). The rms of a signal is the square root of the average of the squared amplitude of the signal, usually measured in inches per second. The average is typically calculated over a one-second period. The rms amplitude is always less than the ppv and is always positive. Decibel notation is used to compress the range of numbers required to describe vibration. The abbreviation VdB is used in this analysis for vibration decibels to reduce the potential for confusion with sound decibels.

Continued vibration of building components can also take the form of an audible low-frequency rumbling noise, which is referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hertz), or when foundations or utilities, such as sewer and water pipes, connect the structure and the vibration source.

Project Site Setting

The project site is located in a rural residential and agricultural area spanning unincorporated Ventura and Santa Barbara counties. The vicinity of the project site is characterized by agricultural or undeveloped land interspersed with single-family residences. The project area contains no divided highways but would involve work within and immediately adjacent to SR 150 and SR 192. The nearest divided highway in the vicinity of the project site is U.S. Highway 101, approximately 0.7 mile southwest of the project site.

Noise levels at the project site are typical of rural residential and agricultural areas. Primary sources of noise can be attributed to roadway traffic along SR 150, SR 192, and nearby private roadways. Traffic in these areas ranges from infrequent along private roadways to moderate frequencies along SR 150 and SR 192.

The nearest airport to the project area is Santa Barbara Airport, located approximately 20 miles to the west. Therefore, airport noise does not contribute substantially to noise levels in the project area.

Four 15-minute noise measurements were collected at points in the project area on Wednesday, June 5, 2019 and a 24-hour noise measurement was collected commencing on Wednesday, June 5, 2019 and concluding on Thursday, June 6, 2019. Noise measurements were sited to characterize ambient noise levels near project components and sensitive receivers in the project area. All noise measurement locations were selected to avoid walls or structures, which could interfere with collection of noise measurements. Table 8 shows the recorded noise measurements and shows noise measurement locations and project components.

Table 8 Noise Measurements

Measurement Number	Measurement Location	Sample Times[1]	L_{eq} (dBA)[2]	L_{min} (dBA)[3]	L_{max} (dBA)[4]	CNEL (dBA)[5]
NM1	SR 192, approximately 500 feet south of Shepard Mesa Road	9:42 a.m. – 9:57 a.m.	64.1	28.8	87.1	–
NM2	SR 150, near BPS-A	10:50 a.m. – 11:05 a.m.	70.1	42.0	84.6	–
NM3	Avocado Hill Road, near BPS-A	10:28 a.m. – 10:43 a.m.	64.5	35.4	78.7	–
NM4	SR 150, near BPS-B	10:12 a.m. – 10:27 a.m.	63.8	36.5	76.5	–
24-Hour Measurement	SR 150	11:55 a.m. – 11:55 a.m.	66.7	31.0	100.4	71.1

[1] Measurements NM1 –NM4 were collected on Wednesday, June 5, 2019. The 24-hour measurement was collected Wednesday, June 5 through Thursday, June 6, 2019.

[2] A-weighted decibel (dBA) is defined as a decibel (dB) adjusted to be consistent with human response. The equivalent noise level (L_{eq}) is defined as the single steady A-weighted level equivalent to the same amount of energy contained in the actual fluctuating levels over a period of time (essentially, the average noise level).

[3] L_{min} is the minimum sound level experienced within the recorded measurement with A-weighted frequency response.

[4] L_{max} is the maximum sound level experienced within the recorded measurement with A-weighted frequency response.

[5] CNEL is a 24-hour equivalent sound level, with an additional 5 dBA penalty to noise occurring during evening hours, between 7:00 p.m. and 10:00 p.m., and an additional 10 dBA penalty is added to noise occurring during the night, between 10:00 p.m. and 7:00 a.m.

Source: Rincon Consultants, field visit on Wednesday, June 5 and Thursday, June 6, 2019 using ANSI Type 2 Integrating sound level meter. See Appendix E for noise monitoring data.

Sensitive Receivers

Noise exposure goals for different types of land uses reflect the varying noise sensitivities associated with those uses. The Ventura County General Plan Hazards and Safety Element identifies noise-sensitive uses as residences; schools, historic sites; cemeteries; parks, recreation, and open space areas; hospitals and care facilities; sensitive wildlife habitats, including the habitat of rare, threatened, or endangered species; hotels and other short-term lodging (e.g., bed and breakfasts and motels); places of worship; and libraries (County of Ventura 2020b). The Santa Barbara County Comprehensive Plan Noise Element considers noise-sensitive land uses to include residential uses (including single- and multi-family housing, mobile home parks, and dormitories), transient lodging, hospitals, nursing homes, convalescent hospitals, public or private educational facilities, libraries, churches, and places of public assembly (County of Santa Barbara 2009b). Table 9 identifies the nearest noise-sensitive receivers to each project component.

Table 9 Noise Sensitive Receivers in Project Area

Project Component	Nearest Noise-Sensitive Receiver	Distance to Project Site
Pipeline	Single-Family Residence west of Avocado Hill Road	Approximately 35 feet
Booster Pump Stations		
BPS-A	Single-Family Residence southwest of proposed site	Approximately 175 feet
BPS-B	Single-Family Residence east of proposed site	Approximately 260 feet
Mechanical and Valving Improvements		
Rincon Pump Plant	Single-Family Residence west of Red Mountain Fire Road	Approximately 470 feet
Rincon Vents	Single-Family Residences along Casitas Vista Road	Approximately 1,700 feet

Regulatory Setting

County of Ventura

VENTURA COUNTY GENERAL PLAN

The Hazards and Safety Element of the Ventura County 2040 General Plan contains the County's Noise Element (County of Ventura 2020). The Noise Element identifies primary noise sources in the county; develops noise contours for existing transportation sources; and provides strategies to reduce noise impacts in the county through the year 2040.

The Noise Element defines noise sensitive receivers by land use and time of sensitivity. According to the County's Noise Element, noise sensitive receivers include residences; schools, historic sites; cemeteries; parks, recreation, and open space areas; hospitals and care facilities; sensitive wildlife habitats, including the habitat of rare, threatened, or endangered species; hotels and other short-term lodging (e.g., bed and breakfasts and motels); places of worship; and libraries.

Section 7.9 of the Hazards and Safety Element of the Ventura County 2040 General Plan contains policies related to noise exposure and emission. Specifically, Policy HAZ-9.2 states new noise generators proposed to be located near any noise sensitive use shall incorporate noise control measures so ongoing outdoor noise levels received by the noise sensitive receiver, measured at the exterior wall of the building, do not exceed any of the following standards:

1. $L_{eq(1H)}$ of 55 dB(A) or ambient noise level plus 3 dB(a), whichever is greater, during any hour from 6:00 a.m. to 7:00 p.m.
2. $L_{eq(1H)}$ of 50 db(A) or ambient noise level plus 3 dB(A), whichever is greater, during any hour from 7:00 p.m. to 10:00 p.m.
3. $L_{eq(1H)}$ of 45 db(A) or ambient noise level plus 3 dB(A), whichever is greater, during any hour from 10:00 p.m. to 6:00 a.m.

In addition, Policy HAZ-9.2 states construction noise and vibration resulting from discretionary development shall be evaluated and, if necessary, mitigated in accordance with the Construction Noise Threshold Criteria and Control Plan (County of Ventura 2010).

VENTURA COUNTY CODE OF ORDINANCES

Article 11 of the Ventura County Code of Ordinances prohibits loud or raucous noise within any residential zone which is audible to the human ear during the hours of 9:00 p.m. to 7:00 a.m. at a distance of 50 feet from the property line of the noise source or 50 feet from any such noise source if the source is in a public right-of-way. While the ordinance indicates "loud or raucous noise" can include operation of riding tractors or other mechanical or electrical devices or hand tools, which could be used during construction activities, Section 6299-2(a) exempts any government entity or public utility, such as Casitas, from the provisions of the ordinance.

CONSTRUCTION NOISE THRESHOLD CRITERIA

The County of Ventura Construction Noise Threshold Criteria and Control Plan establishes thresholds for temporary construction-generated noise at sensitive receivers. Construction noise thresholds are divided into daytime hours (7:00 a.m. to 7:00 p.m.), evening hours (7:00 p.m. to 10:00 p.m.), and nighttime hours (10:00 p.m. to 7:00 a.m.). Per the Construction Noise Threshold Criteria and Control Plan, hospitals and nursing homes are sensitive receivers at all hours, single-

and multi-family residences as well as hotels/motels are sensitive receivers during evening and nighttime hours, and schools, churches and libraries are sensitive receivers during daytime and evening hours when in use (County of Ventura 2010). Construction of the proposed project would generally occur from 8:00 a.m. to 4:30 p.m. (i.e., during daytime hours), and no daytime sensitive receivers (i.e., hospitals, nursing homes, schools, churches, or libraries) are located in the vicinity of the project site. Therefore, these criteria are not applicable to the proposed project and are not utilized in this analysis.

County of Santa Barbara

COMPREHENSIVE PLAN NOISE ELEMENT

The County of Santa Barbara Comprehensive Plan Noise Element (2009b) includes the following guidelines related to noise:

Policy 1 In the planning of land use, a 65 dB day-night average sound level is regarded as the maximum exterior noise exposure compatible with noise-sensitive uses unless noise mitigation features are included in project designs.

Policy 2 Noise sensitive land uses should be considered to include:

- Residential, including single- and multi-family dwellings, mobile home parks, dormitories, and similar uses
- Transient lodging, including hotels, motels, and similar uses
- Hospitals, nursing homes, convalescent hospitals, and other facilities for long-term medical care
- Public or private educational facilities, libraries, churches, and places of public assembly

SANTA BARBARA COUNTY CODE OF ORDINANCES

Section 28-48 of the Santa Barbara County Code states any person who has received an excavation or encroachment permit for work within any right-of-way of a road owned, maintained, or controlled by the County shall avoid unnecessary inconvenience and annoyance to the general public and occupants of neighboring property. The ordinance further restricts the use of any tool, appliance or equipment producing noise of sufficient volume to disturb the sleep or repose of occupants of the neighboring property to between the hours of 7:00 a.m. and 10:00 p.m.

SANTA BARBARA COUNTY ENVIRONMENTAL THRESHOLDS AND GUIDELINES MANUAL

According to the Santa Barbara County Environmental Thresholds and Guidelines Manual (2018), “a proposed development that would generate noise levels in excess of 65 dB(A) CNEL and could affect sensitive receivers would generally be presumed to have a significant impact.” In addition, noise from grading and construction activity proposed within 1,600 feet of sensitive receivers, including residential development, could result in a potentially significant impact if noise levels exceed 65 dB(A). To mitigate this impact, the Manual recommends construction within 1,600 feet of sensitive receivers be limited to weekdays between the hours of 8:00 a.m. and 5:00 p.m. The Manual also suggests noise attenuation barriers and muffling of grading equipment may also be required. Construction equipment generating noise levels above 95 dB(A) may require additional mitigation.

a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction Noise

Temporary noise levels caused by construction activity would be a function of the noise generated by construction equipment, the location and sensitivity of nearby land uses, and the timing and duration of noise-generating activities.

For construction noise assessment, construction equipment can be considered to operate in two modes: stationary and mobile. As a rule, stationary equipment operates in a single location for one or more days at a time, with either fixed-power operation (e.g., pumps, generators, and compressors) or variable-power operation (e.g., pile drivers, rock drills, and pavement breakers). Mobile equipment moves around construction sites with power applied in cyclic fashion, such as bulldozers, graders, and loaders (FTA 2018). Noise impacts from stationary equipment are assessed from the center of the equipment, while noise impacts from mobile construction equipment are assessed from the center of the equipment activity area (e.g., construction site).

Construction noise was estimated using the Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM) (see Appendix E for RCNM worksheets). Typical construction projects have long-term noise averages which are lower than louder short-term noise events due to equipment moving from one point to another on the site, work breaks, and idle time. Additionally, due to the dynamic nature of a construction site, noise levels are calculated from the center of the activity. Thus, noise generated by pump station construction is evaluated from the center of each of the construction locations. As described in the project description, pump station construction would involve the use of an excavator, grader, and crane. With these pieces of equipment operating concurrently, the hourly noise level at 50 feet from the center of pump station construction locations is calculated to be 83 dB(A) L_{eq}, with a maximum noise level of 85 dB(A) L_{max}.

The nearest noise-sensitive receiver to the proposed pump station locations is a single-family residence located west of the BPS-A site at a distance of approximately 100 feet from the edge of the site. Therefore, pump station construction activities would generate maximum hourly noise levels up to 77 dB(A) L_{eq} at this location. Table 10 summarizes pump station construction noise levels at the nearest sensitive receiver.

Table 10 Pump Station Construction Noise

Location	Hourly L_{eq} (dB(A))	L_{max} (dB(A))
Reference Distance (50 feet)	83	85
Single-Family Residence west of BPS-A (100 feet)	77	79

Source: FHWA 2006 (Appendix E)

Unlike pump station construction, which would be centered at individual locations, pipeline construction activities would be mobile and would be continuously moving along a linear alignment. Pipeline construction activities would occur approximately 35 feet from the nearest sensitive receiver (a single-family residence located west of the proposed pipeline along Avocado Hill Road). However, construction equipment used for site preparation and excavation activities would travel throughout the work areas, which would be a minimum of 200 LF by approximately 20 feet in width

(considering a linear progression of 200 to 300 LF per day and a five-foot-wide trench plus construction area buffer). Therefore, mobile equipment associated with pipeline construction activities would operate at an average distance of 67 feet from the nearest sensitive receiver.[6] As stated in the project description, pipeline construction would involve the use of an excavator, loader, dump truck, and vibratory compactor. With these pieces of equipment operating concurrently, the hourly noise level at 50 feet from the pipeline construction area is calculated to be 81 dB(A) L_{eq}, with a maximum noise level of 83 dB(A) L_{max}. Therefore, at the nearest noise-sensitive receiver to the pipeline alignment, pipeline construction activities would generate maximum hourly noise levels up to 79 dB(A) L_{eq}. Table 11 summarizes pipeline construction noise levels at the nearest noise-sensitive receiver.

Table 11 Pipeline Construction Noise

Location	Hourly L_{eq} (dB(A))	L_{max} (dB(A))
Reference Distance (50 feet)	81	83
Single-Family Residence west of Segment 3B along Avocado Hill Road (67 feet)	79	81

Source: FHWA 2006 (Appendix E)

Construction noise impacts at any one residence during pipeline construction would be temporary and short-term because construction would be continuously moving along the pipeline alignment at a rate of approximately 200 to 300 LF per day. Similarly, construction noise impacts at residences near pump station construction would be temporary in nature and limited to the duration of construction activities at each pump station location. Construction activities would occur closest to sensitive receivers located in Ventura County. Pursuant to Section 6299-2(a) of the County of Ventura Code of Ordinances, project construction in Ventura County is exempt from the provisions of the County's noise ordinance. In Santa Barbara County, construction of the pipeline alignment would occur further away from sensitive receivers, resulting in reduced noise impacts to such receivers. However, project construction would still occur within 1,600 feet of sensitive receivers in Santa Barbara County, which has the potential to result in significant impacts, according to the County of Santa Barbara Environmental Thresholds and Guidelines Manual (County of Santa Barbara 2018). The Manual recommends mitigating such impacts by limiting construction within 1,600 feet of sensitive receivers to weekdays between the hours of 8:00 a.m. and 5:00 p.m. As discussed in the project description, project construction would occur during Casitas' normal working hours between 8:00 a.m. and 4:30 p.m. Monday through Friday, excluding holidays observed by Casitas, which would be consistent with the time restrictions included in the Manual. As such, short-term construction noise impacts would be less than significant.

Operational Noise

The primary on-site noise sources would be associated with operation of the booster pump stations. The temporary booster pump station at the BPS-A site, which may be used for approximately three years before the permanent pump station is constructed, would also generate noise. Proposed pipeline segments would be located underground and would result in nominal operational noise. Booster pump stations would be covered by an awning, surrounded by fencing, and electrical

[6] Average distance is based on a minimum 200-foot-long work zone centered approximately 35 feet from the nearest residence. At the edges of the work zone, equipment would operate approximately 100 feet from the residence; at the center of the work zone, equipment would operate approximately 35 feet from the residence. Therefore, mobile equipment in the work zone would operate, on average, approximately 67 feet from the nearest residence.

equipment would be enclosed in a weatherproof structure. Noise levels from the proposed booster pump stations were modeled with SoundPLAN, version 8.1 (SoundPLAN), a three-dimensional acoustical modeling software package. Propagation of modeled stationary noise sources was based on ISO Standard 9613-2, "Attenuation of Sound during Propagation Outdoors, Part 2: General Method of Calculation." The assessment methodology assumes all receivers would be downwind of stationary sources. This is a worst-case assumption for total noise impact because, in reality, only some receivers would be located downwind at any one time. Modeling is based on data for an unenclosed 400-HP pump with motor which would generate 84 dBA at one meter (see pump manufacturer's specifications in Appendix E). The temporary booster pump station would generate noise levels of 50 to 60 dBA and the small air compressor for the surge tank associated with the temporary station would generate up to 80 dBA; conservatively, the modeling for the permanent pump station noise of 84 dBA was used to analyze the permanent pump station. Modeling assumes a vegetated (soft) ground cover.

Operational noise associated with booster pump stations was modeled for the BPS-A and BPS-B locations, which are within approximately 175 feet and 260 feet of residences, respectively. The primary source of noise in the vicinity of the booster pump stations is roadway noise along SR 150. The results of the 24-hour noise measurement collected in the project site vicinity indicate noise levels along SR 150 at a reference distance of 20 feet range from approximately 58.7 dB(A) L_{eq} overnight to 68.7 db(A) L_{eq} during the day. Table 12 shows measured ambient noise levels along SR 150, as well as ambient noise levels at the sensitive receivers nearest the proposed pump stations based on standard mobile source noise attenuation.

Table 12 Ambient Noise Levels at Sensitive Receivers Near Proposed Pump Station Locations

Time	Noise Measurement Along SR 150	Residence Near BPS-A	Residence Near BPS-B
Ambient Noise			
6:00 a.m. – 7:00 p.m.	68.7[1]	52.7[2]	56.5
7:00 p.m. – 10:00 p.m.	64.3[1]	48.3[2]	52.1[3]
10:00 p.m. – 6:00 a.m.	58.7[1]	42.7[2]	46.5[3]
Project Noise			
Pump Station Noise Level	–	57.2	53.3
Pump Station Noise Increase over Ambient Noise Level + 3 dBA			
6:00 a.m. – 7:00 p.m.	–	+1.5	-6.2
7:00 p.m. – 10:00 p.m.	–	+5.9	-1.8
10:00 p.m. – 6:00 a.m.	–	+11.5	+3.8
Significant Impact?	–	**Yes**	**Yes**

[1] Based on 24-hour noise measurement collected on June 5 – June 6, 2019 at a reference distance of 20 feet from the centerline of SR 150. Refer to Table 8 for noise measurement results.

[2] Based on standard mobile source attenuation of 3 dB(A) per doubling distance, given a distance of 800 feet from the residence to centerline of SR 150.

[3] Based on standard mobile source attenuation of 3 dB(A) per doubling distance, given a distance of 330 feet from the residence to centerline of SR 150.

Based on noise contours developed using SoundPLAN, the proposed booster pump station at BPS-A would generate noise levels of approximately 57.2 dB(A) L_{eq} at the nearest residence, and the proposed booster pump station at BPS-B would generate noise levels of approximately 53.3 dB(A) L_{eq} at the nearest residence.

Both booster pump stations are in Ventura County. In accordance with Policy HAZ-9.2 of the Ventura County 2040 General Plan, the project would result in a potentially significant noise impact if the proposed booster pump stations would generate noise at the exterior wall of the nearest sensitive receivers exceeding 55 dB(A) L_{eq} during any hour from 6:00 a.m. to 7:00 p.m.; 50 db(A) L_{eq} during any hour from 7:00 p.m. to 10:00 p.m.; 45 db(A) L_{eq} during any hour from 10:00 p.m. to 6:00 a.m.; or the ambient noise level plus 3 db(A) during any of these time periods, whichever is greater.

Booster pump stations at BPS-A (permanent and temporary) would potentially exceed the ambient noise level plus 3 db(A) during evening (7:00 p.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 6:00 a.m.) hours. The booster pump station at BPS-B would potentially exceed the ambient noise level plus 3 db(A) during nighttime (10:00 p.m. to 6:00 a.m.) hours. Therefore, noise generated by the booster pump stations would potentially exceed the standards outlined in the Ventura County 2040 General Plan, and this impact would be potentially significant.

Mitigation Measure NOI-1 would reduce the potential noise impact to a less than significant level by requiring enclosures around the proposed pump stations which would reduce noise levels to not exceed 3 dBA over ambient noise levels at noise-sensitive receivers. Therefore, this impact would be less than significant with mitigation incorporated.

Emergency Generators

Each pump station may be equipped with an emergency diesel generator, which would supply power to maintain pump station operations during unanticipated traditional power failures. Based on the Preliminary Design Report, emergency generators at BPS-A and BPS-B would be 4,160-volt, 3,000-kilowatt diesel generators. The generators would be located within the proposed BPS-A and BPS-B site boundaries. As stated above, all proposed booster pump station sites are in Ventura County.

Operation of the emergency diesel generators could result in temporary exceedances of the noise standards outlined in Policy HAZ-9.2 of the Ventura County 2040 General Plan. Additionally, pump station maintenance activities could require intermittent testing of the generators, which could also potentially result in a temporary exceedance of the applicable noise standards. However, operation of the emergency generators would be necessary to maintain system operations and water supply during times of traditional power failure. As such, operation would be due to extenuating circumstances and temporary in nature. Maintenance and testing of the emergency generators would be short-term in duration and limited to daytime hours, reducing potential impacts to the nearest sensitive receivers. Given the temporary nature of noise associated with the emergency generators, neither operation nor testing of the generators would result in ongoing outdoor noise levels exceeding the standards established in the Ventura County 2040 General Plan. Consequently, this impact would be less than significant.

Off-Site Traffic Noise

Project operation would require infrequent vehicle trips associated with meter reading, routine inspection and maintenance, periodic testing, and emergency repairs. Such activities would require approximately 20 annual trips, which would add trips to roadways in the project area, including

SR 150 and SR 192. According to Caltrans 2019 Traffic Volumes, the traffic volume is approximately 3,300 average daily trips along SR 150 at the Santa Barbara-Ventura County line and 4,800 average daily trips along SR 192 at SR 150 (Caltrans 2020a). On days of project maintenance trips, project-related trips would increase average daily trips on these roads by approximately 2 one-way vehicle trips, resulting in a less than 0.1 percent increase in traffic on project area roadways. Consequently, project maintenance trips would not result in a perceptible increase in roadway noise, and this impact would be less than significant.

Mitigation Measure

NOI-1 Pump Station Noise Control

Prior to operation of the temporary and permanent booster pump stations at the BPS-A site and the permanent booster pump station at BPS-B site, the pump, motor, and any other noise-generating mechanical equipment shall be equipped with an enclosure or noise control curtain system to reduce noise levels at surrounding sensitive receivers. The enclosures shall break the line of sight between the noise generating equipment and the sensitive receivers and be constructed of fiberglass or other material capable of providing at least a 12 dB(A) noise level reduction at BPS-A and 4 dB(A) noise level reduction at BPS-B, pursuant to manufacturer's specifications or verification by qualified acoustician. During routine maintenance trips to the pump station, the enclosure shall be inspected and maintained in accordance with manufacturer's specifications to provide continued noise reduction.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Certain types of construction equipment can generate high levels of groundborne vibration. Construction of the proposed project would potentially use loaded trucks and a bulldozer during most construction phases, as well as a vibratory roller during the paving phase. Neither blasting nor pile driving would be required for construction of the proposed project. Construction vibration estimates are based on vibration levels reported by Caltrans and the FTA (Caltrans 2020b; FTA 2018).

A quantitative assessment of potential vibration impacts from construction activities, such as blasting, pile-driving, vibratory compaction, demolition, drilling, or excavation, may be conducted using the equations developed by Caltrans and the FTA (Caltrans 2020b; FTA 2018). Table 13 shows typical vibration levels for various pieces of construction equipment used in the assessment of construction vibration (FTA 2018).

Table 13 Typical Vibration Levels Measured during Construction Activities

Equipment	PPV at 25 feet (in/sec)	Approximate L_v VdB at 25 feet
Large bulldozer	0.089	87
Loaded trucks	0.076	83
Small bulldozer	0.003	58
Vibratory Roller	0.210	94
Jackhammer	0.035	79

ppv = peak particle velocity; in/sec = inches per second; VdB = vibration decibels

Source: FTA 2018

Project construction activities would occur as close as 35 feet from the nearest structure, a residence along Avocado Hill Road near the pipeline. Therefore, construction vibration impacts are assessed at a distance of 35 feet to estimate maximum vibration impacts to structures in the project area. Vibration levels at structures located at a distance of greater than 35 feet from the project site would be less than those experienced at structures located 35 feet from the project site; therefore, vibration levels were not quantified at receivers greater than 35 feet from the project site. Neither the County of Ventura nor County of Santa Barbara have established groundborne vibration thresholds. Therefore, for the purposes of this analysis, construction vibration impacts would be considered significant if vibration levels exceed 94 VdB, the level at which transient vibration sources, such as construction equipment, is considered to be distinctly perceptible (Caltrans 2020b). As shown in Table 14, groundborne vibration from construction equipment would not exceed 94 VdB, the identified threshold, at the nearest structure. Therefore, construction vibration impacts would be less than significant.

Table 14 Vibration Levels at Sensitive Receivers during Project Construction

Equipment	Estimated VdB at Nearest Structures (Residences 35 feet)
Large Bulldozer	84
Small Bulldozer	55
Loaded Trucks	80
Vibratory Roller	91
Jackhammer	76
Threshold	**94**
Threshold Exceeded?	No

VdB = vibration decibels
See Appendix E for vibration analysis worksheets.
Source: FTA 2018

After construction, the proposed potable water pipelines, booster pump stations, and existing infrastructure improvements would not generate significant stationary sources of vibration, such as by use of heavy equipment operations. Therefore, operational vibration impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

As discussed in Section 9, *Hazards and Hazardous Materials*, the closest public airport to the project is the Santa Barbara Airport, located approximately 20 miles west of the project site. The project site is not located within an airport land use plan or within two miles of an airport. Therefore, the project would not expose people working in the project area to excessive noise levels due to proximity to an airport. No impact would occur.

NO IMPACT

14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	■
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■

a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The proposed project would not be utilized to increase the amount of water currently being supplied to existing customers or to provide water to areas currently not serviced by Casitas or CVMD. The proposed project would not allow development of land which previously could not be developed due to water service constraints. No impact associated with population growth would occur.

NO IMPACT

b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The proposed project would not displace people or housing. Therefore, no impact related to displacement of people or housing would occur.

NO IMPACT

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15 Public Services

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	1 Fire protection?	☐	☐	■	☐
	2 Police protection?	☐	☐	■	☐
	3 Schools?	☐	☐	☐	■
	4 Parks?	☐	☐	☐	■
	5 Other public facilities?	☐	☐	☐	■

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The construction and operation of an underground pipeline and associated water infrastructure would generate virtually no demand for increased public services. The proposed project would not include any features or facilities requiring additional or unusual fire protection resources. During construction, fire protection may be required, but these would be short-term demands and would not require increases in the level of public service offered or affect these agencies' response times. Because of the low probability and short-term nature of potential fire protection needs during construction, the proposed project would result in less than significant impacts.

LESS THAN SIGNIFICANT IMPACT

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Impacts to police protection would be less than significant for reasons similar to those provided for fire protection under item (a.1).

LESS THAN SIGNIFICANT IMPACT

a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

As discussed in Section 14, *Population and Housing*, the proposed project would not directly or indirectly induce population growth. The project would not involve the construction of housing or other such facilities which may increase demand for school services. Therefore, no impact related to schools would occur.

NO IMPACT

a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

The proposed project would place no demand on parks for reasons similar to those provided for schools under item (a.3).

NO IMPACT

a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The proposed project would not involve the introduction of a temporary or permanent human population into this area. Accordingly, the proposed project would not result in any long-term impacts to other public facilities.

NO IMPACT

16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	■
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	■

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

As discussed in Section 14, *Population and Housing,* the proposed project would not directly or indirectly support population growth. Therefore, the project would not generate any residents who would require parks or other recreational facilities. Consequently, no impact would occur to such facilities.

NO IMPACT

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The proposed project does not include recreational facilities, nor does it require the construction or expansion of recreational facilities. As such, no impact would occur.

NO IMPACT

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17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	■	☐	☐
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	■
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	☐	☐	☐	■
d. Result in inadequate emergency access?	☐	■	☐	☐

a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The proposed project involves construction and operation of potable water infrastructure, which would not conflict with adopted policies, plans, or programs addressing the circulation system, including public transit, bicycle, or pedestrian facilities. The proposed pipeline alignments would be placed primarily along existing public and private roadways while proposed pump stations would be constructed on agricultural or undeveloped land. Construction staging and worker parking for pipeline segments would occur primarily on disturbed sites adjacent to the proposed alignment, while staging and worker parking for pump station construction would primarily occur at the pump station sites. The proximity of staging locations to the proposed pipeline alignment and pump station sites would reduce vehicle travel between staging and work zones and minimize trips.

Pipeline construction activities would install approximately 200 to 300 LF of pipeline per day before moving to the next segment of pipeline. Full closures of public roadways during this work would not be necessary, as the trench should be on one side of the street, in the public right-of-way. Full closure of private roadways or drives may occur subject to the conditions negotiated in right-of-way and access easements. The project would implement traffic control with flag-persons as necessary to allow travel within one-lane roadway segments during pipeline construction, maintaining vehicle, transit, bicycle, and pedestrian access to the extent practicable during construction. Furthermore, for work within Caltrans roadways, including SR 192 and SR 150, the project would comply with all requirements specified in the project's encroachment permit, including workspace and hours restrictions and traffic control requirements.

Anticipated construction-related vehicle trips include construction workers traveling to and from the project work areas, haul trucks (including for import and export of excavated materials, as needed),

and other trucks associated with equipment and material deliveries. An estimated 10 two-way worker trips per day would occur during project construction. Any potential local traffic impacts from this increase in vehicle traffic would be temporary and move with construction activities as they progress along the alignment.

Project operation would require infrequent vehicle trips associated with meter reading, routine inspection and maintenance, periodic testing, and emergency repairs. Such activities would require approximately 20 annual trips, which would not be a substantial increase in traffic on roadways in the vicinity of the project site. Project operation would not conflict with any program, plan, ordinance, or policy addressing the circulation system.

Because construction is a short-term activity, and impacts would move as work progresses along the pipeline corridor, construction-related traffic impacts would not be substantial. Roadways disturbed during pipeline construction would be restored to match the surrounding road type once construction is complete. Nonetheless, project construction would temporarily introduce additional worker and truck trips in the vicinity of the project site, which could potentially result in a significant impact. With implementation of Mitigation Measure T-1, the impact would be reduced to a less-than-significant level.

Mitigation Measure

T-1 Traffic Management Plan

The contractor shall submit a Traffic Management Plan (TMP) to the County of Ventura, County of Santa Barbara, and Caltrans, as necessary, for review and approval prior to construction or issuance of applicable permits. The TMP shall:

1. Identify construction-related vehicle routes, especially trucks. Truck routes shall minimize travel on roadways where truck traffic is ordinarily not permitted or weight restrictions are imposed.
2. Identify proper precautions to protect all pavements, curb and gutter, sidewalks, and drainage structures from damage associated with truck traffic on project area roadways.
3. Identify emergency access routes and detours (if any) for emergency response along roadways potentially affected by project construction. Additionally, describe procedures in place to provide priority access for emergency service vehicles through the construction work zone.
4. Describe traffic control measures to be implemented to manage traffic and reduce potential traffic impacts in accordance with the most recent version of the California Manual of Uniform Traffic Control Devices. Traffic control measures may include, but are not limited to, flag persons, warning signs, lights, barricades and cones to provide safe passage of vehicular (including cars and buses), bicycle and pedestrian traffic, and access by emergency responders.
5. Identify off-street or turnout parking areas in which construction workers shall park and delineate those in the contractor specifications.
6. Identify the location of any transit stops and transit and bicycle routes which may be temporarily impacted by construction activities and identify places to temporarily relocate transit stops and transit and bicycle routes, if necessary. Describe signage to be used for relocated transit, bicycle, or pedestrian facilities during project construction.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

CEQA Guidelines Section 15064.3(b) identifies criteria for evaluating transportation impacts. Specifically, the guidelines state vehicle miles traveled (VMT) exceeding an applicable threshold of significance may indicate a significant impact. As discussed below, the project is not expected to affect VMT in the project area.

A VMT calculation is typically conducted on a daily or annual basis, for long-range planning purposes. As previously discussed under item (a), traffic on local roadways may be temporarily increased during project construction due to the presence of construction vehicles and equipment. Increases in VMT from construction would be short-term, minimal and temporary. The proposed project would not change existing roadways or generate growth so substantial VMT growth could occur. In addition, maintenance of the proposed project would consist of infrequent, as-needed site visits for meter reading, routine maintenance and inspections, periodic testing, and emergency repairs. Such visits would require approximately 20 trips per year and would not substantially contribute to VMT near the project site. Therefore, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b). No impact would occur.

NO IMPACT

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

Project components consist of potable water infrastructure, which would have no impact on street design. The proposed project would therefore not create or substantially increase a traffic hazard due to a design feature. No impact would occur.

NO IMPACT

d. Would the project result in inadequate emergency access?

Lane closures and other potential traffic impacts caused by construction activities along or in SR 150 or SR 192 would have the potential to impede emergency response to the project area, or to areas accessed via these roadways. Therefore, a potentially significant impact could occur.

Implementation of Mitigation Measure T-1 would minimize interference with emergency response times or other performance public service performance objectives by requiring preparation and execution of a TMP identifying emergency access routes and detours during construction. Additionally, Mitigation Measure T-2, described below, would require notification of emergency service providers regarding construction plans prior to commencement of construction activities. With implementation of Mitigation Measures T-1 and T-2, the impact would be reduced to a less-than-significant level.

Project operation and maintenance would not introduce new activities or substantial operational traffic with the potential to result in inadequate emergency access. Therefore, the impact related to emergency access during project operation would be less than significant.

Mitigation Measure

T-2 Emergency Service Providers

The contractor shall notify emergency service providers (fire and police departments serving the project site) with construction contact names, locations, schedules, and traffic plans, if applicable, prior to the start of construction.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☐	☐	■
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	■

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, "tribal cultural resources." AB 52 states, "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states the lead agency shall establish measures to avoid impacts altering the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

1. Listed or eligible for listing in the CRHR or in a local register of historical resources as defined in PRC section 5020.1(k), or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified or adopted. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those having requested notice of projects proposed in the jurisdiction of the lead agency. Because the proposed project would extend into Santa Barbara county, this list was expanded to also include tribes having requested notice of projects proposed in the jurisdiction of CVWD, a responsible agency for the proposed project.

On June 22, 2019, Casitas distributed AB 52 consultation letters for the proposed project, including project information, map, and contact information to three Native American tribes. The tribal governments provided with an AB 52 consultation letter (via certified mail) include the following list of recipients:

- Barbareño/Ventureño Band of Mission Indians
- San Gabriel Band of Mission Indians
- Torres Martinez Desert Cahuilla Indians

Under AB 52, Native American tribes have 30 days to respond and request further project information and request formal consultation; however, none of the contacted tribes responded within 30 days of mailing of the letters.

Although not required, Casitas also sent AB 52 consultation letters (via certified mail) to the Native American tribes which have requested such notification from CVWD regarding CVWD projects, including:

- Chumash Council of Bakersfield
- Coastal Band of the Chumash Nation
- Northern Chumash Tribal Council
- San Luis Obispo County Chumash Council
- Santa Ynez Band of Chumash Indians
- yak tityu tityu yak tiłhini – Northern Chumash Tribe

No response was received from these additional six tribes.

Since the time of initial AB 52 consultation, the project description has been revised to include a selected route for the intertie pipeline, new locations for BPS-A and BPS-B, and additional improvements at existing Casitas facilities. In response to those revisions, Casitas distributed updated AB 52 consultation letters on September 1, 2022, which included project information, map and contact information to three Native American tribes for the purposes of CEQA.

- Barbareño/Ventureño Band of Mission Indians
- San Gabriel Band of Mission Indians
- Torres Martinez Desert Cahuilla Indians

Additionally, CVWD also sent updated AB 52 consultation letters on September 8 and 9, 2022, to the Native American tribes which have requested such notification from CVWD regarding CVWD projects, including:

- Barbareño Band of Chumash Indians
- Chumash Council of Bakersfield
- Coastal Band of the Chumash Nation
- Northern Chumash Tribal Council
- San Luis Obispo County Chumash Council
- Santa Ynez Band of Chumash Indians
- yak tityu tityu yak tiłhini – Northern Chumash Tribe

The Barbareño/Ventureño Band of Mission Indians requested additional information about the proposed project. The Barbareño Band of Chumash Indians requested a copy of the Draft IS-MND be sent once finalized for public circulation. Additionally, a response from the yak tityu tityu yak tiłhini – Northern Chumash Tribe was received indicating the tribe has no comments on the project. No requests for consultation meetings were received. Accordingly, AB 52 consultation is complete for the project. No known sacred sites or tribal cultural resources have been specifically identified within the project site or vicinity.

a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*

b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

No tribal cultural resources have been identified on or near the project site. Therefore, the project would not cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074. No impact would occur.

NO IMPACT

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19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	■	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	■
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	■
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	■	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	■	☐

a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Water

The proposed project involves the construction of potable water pipelines and associated infrastructure to facilitate transfer of local potable water supplies between Casitas and Santa Barbara County water purveyors and bolster regional supply reliability and portfolio diversification. The environmental effects of these impacts are analyzed throughout this document. The proposed

infrastructure would not be utilized to increase the amount of water currently being supplied to existing customers or to provide water to areas currently not served by Casitas or CVMD. As concluded by this IS-MND, the water facilities included in the proposed project would not cause unmitigable significant environmental effects. Consequently, no additional impacts related to water facilities would occur.

Wastewater Treatment

The project site is located in a rural residential and agricultural portion of Ventura and Santa Barbara counties and is not served by a centralized wastewater treatment system. Portions of the Casitas and CVWD service areas—which would be served by the project's infrastructure improvements—are served by the Ojai Valley Sanitary District and Carpinteria Sanitation District, respectively.

The project would not generate sanitary wastewater or otherwise contribute to an increase in wastewater treatment requirements. The project would improve water supply reliability by facilitating the transfer of local potable water supplies between Casitas and CVWD. The project would not increase water demand, nor would it extend potable water service to areas not currently served by Casitas or CVWD. As such, the amount or characteristics of wastewater treated at area septic systems or Ojai Valley Sanitary District or Carpinteria Sanitary District facilities would remain unchanged with implementation of the proposed project compared to existing conditions. Wastewater discharges from the treatment plant(s) would not change. Thus, no impact related to wastewater treatment would occur.

Stormwater Drainage

As discussed in Section 10, *Hydrology and Water Quality*, the project would primarily be constructed underground along public and private roadways and would not substantially increase the rate or amount of surface runoff so as to exceed the capacity of existing or planned drainage systems or provide additional sources of polluted runoff. Although construction activities would disturb paved roadways in the project area due to trenching and other pipeline installation methods, this disturbance would be temporary. After construction, the project area would be restored to its original condition and any drainage pattern would be the same as it was prior to project construction activities. Proposed pump stations would add a nominal amount of impervious surface area through the construction of weatherproof structures, approximately 420 square feet in area for each pump station. This marginal increase in impervious surface cover would not substantially alter the project site's drainage characteristics or result in excess runoff requiring the construction of new or expanded stormwater facilities. Therefore, impacts related to stormwater drainage would be less than significant.

Electric Power

As discussed in Section 6, *Energy*, for the purpose of this Initial Study, it is conservatively estimated use of the proposed project would occur for approximately 680 hours per year. Under these conditions, the booster pump stations would require 662,200 kilowatt-hours (kWh) of electricity annually. The water treatment equipment at BPS-A would require an additional 2,200 kWh of electricity annually under the same conditions.

The pump stations would be served by existing Southern California Edison (SCE) infrastructure, including transmission lines and substations, many of which were recently improved or are currently undergoing improvements as part of the SCE Santa Barbara County Reliability Project. The project's

increase in energy demand would be supplied by the regional electricity grid which is increasingly powered by renewable energy. Given the project would be served by existing electric power infrastructure in the project vicinity, no new or relocated energy facilities would be required as a result of the proposed project. Impacts related to electric power would be less than significant.

Natural Gas

The project area is served by Southern California Gas (SoCalGas). A SoCalGas high-pressure gas line runs along the private road southeast of SR 150 leading to the proposed tie-in location. While the project's Preliminary Design Report acknowledges a concrete saddle may be placed between the proposed pipeline and the existing gas line, relocation or alterations to the existing gas line would not be necessary. The project would not involve any components requiring natural gas service and is not anticipated to involve the relocation of existing natural gas facilities. Therefore, no impact related to natural gas facilities would occur.

Telecommunications

As noted in the project description, project components would be monitored remotely via Casitas' SCADA system, which would require radio communications to operate. However, the requisite radio communication infrastructure would be constructed as part of the pump station buildings and would not involve the relocation of existing telecommunications facilities. The impacts of the SCADA system are analyzed throughout this IS-MND as part of the pump station buildings. Therefore, no further impact related to telecommunications facilities would occur.

LESS THAN SIGNIFICANT IMPACT

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

The project consists of the construction and operation of potable water facilities designed to improve supply reliability by facilitating the transfer of local potable water supplies. Project construction water requirements would be met via Casitas' and CVWD's existing supplies and facilities. Project operation would not increase the amount of water supplied to existing customers and would not expand service beyond areas presently served by Casitas or CVWD. Moreover, the proposed project would have a beneficial effect on potable water demands by allowing Casitas to access its existing State Water Project water allocation in times of drought via transfers with CVWD. Therefore, no impact related to sufficiency of water supplies would occur.

NO IMPACT

c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

As discussed in item (a), the project would not generate sanitary wastewater or otherwise contribute to an increase in wastewater treatment requirements. No impact would occur.

NO IMPACT

d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

A number of landfills serve the project site vicinity, including the Toland Road Landfill in Santa Paula (approximately 37 miles driving distance east of the project site), Tajiguas Landfill in Santa Barbara County (approximately 41 miles driving distance west of the project site), and Simi Valley Landfill and Recycling Center in Simi Valley (approximately 49 miles driving distance southeast of the project site).

The Ventura Regional Sanitation District operates the Toland Road Landfill, which has a permitted capacity of 30 million cubic yards and a maximum disposal capacity of 2,864 tons per day. As of December 2018, the remaining capacity at the landfill was approximately 16.0 million cubic yards. The landfill solid waste permit lists an estimated closure date of 2033. Wastes accepted include construction and demolition materials, agricultural waste, industrial waste, sludge (biosolids), and mixed municipal waste (CalRecycle 2019a).

The Tajiguas Landfill, operated by the County of Santa Barbara Public Works Department, has a permitted capacity of 23.3 million cubic yards and a maximum permitted throughput of 1,500 tons per day. As of March 2016, the remaining capacity at the landfill was approximately 4.3 million cubic yards. Tajiguas Landfill accepts a variety of waste, including agricultural, asbestos, construction/demolition, industrial, mixed municipal, sludge (biosolids), and tires (CalRecycle 2019b).

Finally, Waste Management of California operates the Simi Valley Landfill and Recycling Center, which has a permitted capacity of 119.6 million cubic yards and a maximum disposal capacity of 9,250 tons per day. As of January 2019, the remaining capacity was approximately 82.9 million cubic yards. The landfill solid waste permit lists an estimated closure date of 2063. Materials accepted include construction and demolition materials, industrial waste, sludge (biosolids), and mixed municipal waste (CalRecycle 2019c).

Construction activities may temporarily generate solid waste, which would be disposed of in accordance with all applicable federal, State, and local statutes and regulations. As described above, local solid waste infrastructure has the capacity to accept solid waste generated by project construction activities. Once constructed, project operation would not generate substantial solid waste. The project would not impair the attainment of solid waste reduction goals. Potential impacts would therefore be less than significant.

LESS THAN SIGNIFICANT IMPACT

20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	■	☐	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	■
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	■
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	■

a. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

The project site is located in an SRA designated as moderate to very high fire hazard severity zones (CALFIRE 2007a, 2007b, 2008, 2010).

Project operation and maintenance would not introduce new activities with the potential to impair an adopted emergency response plan or emergency evacuation plan. As discussed in Section 17, *Transportation*, construction activities associated with the proposed project may require temporary road or lane closures which could impede emergency response. To minimize interference with emergency response or emergency evacuation activities during the construction period, Mitigation Measure T-1 would require preparation of a traffic management plan identifying emergency access routes and detours during construction. In addition, Mitigation Measure T-2 would require notification of emergency service providers regarding construction plans prior to commencement of construction activities. With mitigation, impacts to adopted emergency response plans or emergency evacuation plans would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Heavy duty equipment used during project construction may produce sparks with the potential to ignite vegetation. However, California PRC Section 4442 mandates the use of spark arrestors, which prevent the emission of flammable debris from exhaust, on earth-moving and portable construction equipment with internal combustion engines operating on any forest-covered, brush-covered, or grass-covered land. Furthermore, PRC Sections 4427 and 4431 specify standards for conducting construction activities on days when a burning permit is required, and PRC Section 4428 requires construction contractors to maintain fire suppression equipment during the highest fire danger period (April 1 to December 1) when operating on or near any forest-covered, brush-covered, or grass-covered land. Therefore, with compliance with applicable PRC provisions, project construction would not exacerbate wildfire risk.

The proposed project involves water pipelines, booster pump stations, and mechanical and valving upgrades to existing infrastructure. It would not include housing or other structures which could accommodate occupants. Therefore, the project would not house occupants which could potentially be exposed to wildfire risks. No impact would occur.

NO IMPACT

c. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The proposed project is itself a water infrastructure project, the environmental impacts of which are analyzed in this IS-MND. The project would not require the installation or maintenance of associated fire protection infrastructure, as it does not involve housing or other structures which could accommodate occupants. No impact related to fire protection infrastructure would occur.

NO IMPACT

d. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

As discussed in Section 10, *Hydrology and Water Quality*, the proposed project would not significantly alter drainage patterns or stormwater runoff volumes or rates in the vicinity of the project site. Construction activities would be short-term. The project would not include housing or other structures which could accommodate occupants. If a wildfire were to cause runoff, post-fire slope instability, or drainage changes in the vicinity of the project site, post-fire flooding or landslides may occur. However, the project would not expose people or structures to post-fire risks and would not exacerbate such risks. No impact related to post-fire risks would occur.

NO IMPACT

21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	■
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	■	☐	☐
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	■	☐	☐

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

As described in Section 4, *Biological Resources*, the project would result in temporary impacts to species habitat, primarily as a result of construction activities within and adjacent to nearby rivers and streams, including Rincon Creek. With incorporation of Mitigation Measures BIO-1 through BIO-8, impacts to biological resources would be reduced to a less-than-significant level. As such, the project would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce or restrict the range of a rare or endangered plant or animal. As further

discussed in Section 5, *Cultural Resources*, no archaeological resources have been identified in the project site and the project would result in a less than significant impact to nearby built-environment resources. As such, the project would not eliminate important examples of the major periods of California history or prehistory. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Cumulative impacts are defined as two or more individual (and potentially less than significant) project effects which, when considered together or in concert with other projects, combine to result in a significant impact within an identified geographic area. In order for a project to contribute to cumulative impacts, it must result in some level of impact on a project-specific level. As previously described, several of the project effects are identified as "No Impact," including all the checklist questions under land use and planning, mineral resources, population and housing, recreation, tribal cultural resources. The following discussion looks only at those effects for which some level of potential impact was identified, which includes topics for which a "Less than Significant Impact" was identified, as well as those for which the threshold question assumed some level of impact (i.e., those for which consideration of a potential "significant" effect was considered, per *CEQA Guidelines* Section 15382; in this case, threshold questions which assumed impacts would be "Less than Significant with Mitigation Incorporated").

Potential regional cumulative effects were considered for the remaining environmental topics, for which the project was found to result in less than significant impacts (without or with project mitigation):

- **Aesthetics.** The project consists predominantly of underground pipelines and infrastructure improvements, which would not result in aesthetic impacts following construction. Proposed pump stations would be housed in an approximately 420-square-foot and 10-foot-tall weatherproof structure. While the structures may be visible, it would be similar in character to sheds, garages, or other ancillary buildings associated with agricultural operations in the vicinity of the project site. Furthermore, given the posted speed limit on SR 150 in the vicinity of the proposed booster pump station locations (55 miles per hour), structures would be only briefly visible, minimizing their aesthetic impact and the potential to result in cumulative impacts along the eligible scenic highway. As such, these components of the project would be unlikely to contribute considerably to a significant cumulative aesthetic impact.
- **Agriculture and Forestry Resources.** As described in Section 2, *Agriculture and Forestry Resources*, the project site contains land designated as Prime Farmland and Farmland of Statewide Importance. Portions of the project site are zoned for agriculture. BPS-A would convert mapped Farmland to non-agricultural land; however, the amount converted, approximately 25,800 square feet would not significantly contribute to the decline of Farmland. Other project components would primarily be constructed within existing roadways or on previously disturbed, graded lots which are not currently used for agricultural production. Furthermore, the project would be consistent with applicable agricultural zoning regulations. The project would not expand water service to areas not currently served by Casitas or CVWD and, therefore, would not indirectly result in conversion of agricultural or forestry land through

urban development, growth, or expansion. For these reasons, the project would not contribute to any cumulative impacts with respect to agriculture and forestry resources would occur.

- **Air Quality.** Air pollutant and GHG emissions disperse from their original source and can affect the entire air basin (or, with global warming, potentially the entire Earth). For air quality, the baseline analysis addresses the cumulative condition—it is the contribution to the larger picture which is assessed in analyses of consistency with regional air quality strategies and pollutant dispersal. Air pollutant emissions associated with the project correlate with the traffic generated by the project, as the addition of vehicles on the roadways directly correlates to additional pollutant emissions. As discussed under Section 17, *Transportation*, the project would result in a short-term increase in traffic during project during project construction; however, project operation would require approximately 20 maintenance trips per year and, therefore, would not result in a substantial long-term increase in traffic with the potential to degrade air quality. In addition, the project would include measures to reduce construction-related and operational air pollutant and GHG emissions. Other projects in the air basin would be required to comply with federal, State, regional, and local regulations and laws put in place to reduce impacts from air pollutant and GHG emissions. Therefore, the project would not result in significant cumulative impacts associated with air quality and GHG emissions.
- **Biological Resources.** As described in Section 4, *Biological Resources*, the project could potentially result in significant impacts to California legless lizard, San Diego desert woodrat, and yellow warbler (special status species), protected nesting birds (including raptors), and sensitive natural vegetation communities (including riparian habitat and potentially jurisdictional areas). However, implementation of Mitigation Measures BIO-1 through BIO-8 would reduce impacts to biological resources to less-than-significant levels. Other projects in the region would be required to comply with federal, State, regional, and local regulations and laws put in place to minimize impacts to biological resources. Therefore, the project would not result in significant cumulative impacts to biological resources.
- **Cultural Resources.** Ground-disturbing activities during project construction could potentially result in the accidental discovery on unknown archaeological resources. However, due to the lack of known archaeological resources at the project site and/or project site vicinity, the project would not result in significant cumulative impacts to archaeological resources. In addition, the project would not result in a substantial adverse change to a built environment resource listed or eligible for listing in the NRHP or the CRHR. Therefore, the project would not result in significant cumulative impacts to historic resources.
- **Energy.** Refer to the discussion within the *Air Quality* bullet above.
- **Geology and Soils.** Impacts associated with geology and soils are inherently restricted to the project site and would not contribute to cumulative impacts associated with other future developments. Therefore, no contribution to cumulative impacts to geology or soils would occur.
- **GHG Emissions.** Refer to the discussion within the *Air Quality* bullet above.
- **Hazards and Hazardous Materials.** With regard to hazards and hazardous materials, no regional concern is identified (i.e., no significant cumulative impact). In the event the project would result in accidental discharge associated with transport, use, storage, and/or disposal of hazardous materials during construction or operation of the project, prescribed activities to be conducted in accordance with the NPDES Construction General Permit and Mitigation Measure HAZ-1 would reduce the impact associated with the discharge of contaminants to a less-than-significant level. The project would also comply with applicable federal, State, and local laws and

regulations regarding hazardous materials. Therefore, any project contribution would not be cumulatively considerable.

- **Hydrology and Water Quality.** Potential water quality impacts associated with the proposed project would generally be limited to short-term construction-related erosion/sedimentation, as the project would not result in an appreciable increase in impervious surface area or substantial alteration of drainage patterns. Implementation of construction BMPs, as part of project conformance with NPDES permit conditions, would effectively eliminate the potential for drainage- and water quality-related impacts. The project would facilitate transfer of water supplies between Casitas and CVWD, which could result in movement of groundwater between the source basins of each of these water purveyors. As discussed in Section 10, *Hydrology and Water Quality,* the project would not conflict with any Groundwater Sustainability Plan for any of these basins, as no such plan has been adopted to date. Furthermore, transfers facilitated by the project would allow for use and storage of Casitas' SWP allocation, alleviating reliance on local groundwater supplies during times of drought. Accordingly, the project's contribution to any cumulative impacts related to hydrology and water quality would not be cumulatively considerable.
- **Land Use and Planning.** The project site is within Santa Barbara County, Ventura County, and the coastal zone, and each area is subject to its own plans which are adopted for the purpose of avoiding or mitigating an environmental effect. The project would comply with all applicable regulations for the purposes of avoiding an environmental effect. Implementation of mitigation measures listed in Sections 1 through 20 would reduce environmental impacts to a less-than-significant level and further compliance with applicable regulatory standards. Therefore, the project impacts to land use and planning would not be cumulatively considerable.
- **Noise.** The project site is within a rural residential area. Noise impacts are inherently restricted to the project area and would not contribute to cumulative impacts associated with other future developments. Furthermore, given the rural residential environment of the project site and attenuation of noise, future development would not be anticipated to occur close enough to the immediate vicinity of the project to result in cumulative noise impacts. Considering noise impacts within the project area are regulated by County of Ventura County and County of Santa Barbara ordinances and General Plan policies and the project would incorporate applicable mitigation, the project would not incrementally contribute to a cumulative noise impact, significant or otherwise.
- **Public Services.** Any potential impacts to public services would be associated with temporary demand for police or fire protection services during project construction. As concluded in Section 15, *Public Services*, such impacts would be less than significant. The project would not induce population growth and thereby would not, directly or indirectly, contribute to cumulative impacts to public services.
- **Transportation.** The project would result in a temporary increase in traffic associated with project construction. However, implementation of Mitigation Measures T-1 and T-2 would reduce the impact associated with construction traffic to a less-than-significant level by requiring implementation of a Traffic Management Plan and notification of emergency service providers. Once operational, the project would require approximately 20 trips per year for routine maintenance activities. This minor increase in trips would not result in any substantial long-term transportation impacts. Given the temporary nature of construction-related traffic impacts and the fact the project would not generate a substantial amount of operational traffic, the project's contribution to any cumulative transportation impact would not be cumulatively considerable.

- **Utilities and Service Systems.** The project would not induce population growth and therefore would not, directly or indirectly, contribute to cumulative impacts to utilities and service systems.
- **Wildfire.** As described in Section 20, *Wildfire*, potential wildfire impacts associated with the project would be limited to short-term construction-related impacts to emergency response, which would be less than significant with incorporation of Mitigation Measures T-1 and T-2. The project would not result in long-term wildfire impacts, as it would involve operation of potable water infrastructure located either belowground or in enclosed structures. Given there would be no long-term operational wildfire impacts and the short-term nature of any construction-related wildfire impacts, the project's contribution to any cumulative impact would not be considerable.

For these reasons, the project would not result in a considerable impact to any cumulative effects significant or otherwise.

LESS THAN SIGNIFICANT IMPACT

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

In general, impacts to human beings are associated with such issues as air quality, hazards and hazardous materials, and noise impacts. As detailed under Section 3, *Air Quality*, the proposed project would not result, either directly or indirectly, in adverse hazards related to air quality. As discussed in Section 9, *Hazards and Hazardous Materials,* the project would have the potential to result in significant impacts associated with hazardous materials spills or leaks during construction and disturbance of contaminated soils. Such impacts would be reduced to a less-than-significant level through implementation of Mitigation Measures HAZ-1 through HAZ-3. As discussed in Section 13, *Noise,* the project could potentially result in a significant impact to noise-sensitive receptors due to the operation of the booster pump stations. However, with implementation of Mitigation Measures NOI-1, the potential noise impact would be reduced to a less than significant level by requiring a noise-reducing enclosure around the pump station. Therefore, impacts to human beings would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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Federal Cross-Cutting Environmental Regulations Evaluation

The proposed project may receive funding under a state program with a federal funding component. Therefore, to assist in compliance with the federal environmental requirements for the funding program, this document includes analysis pertinent to several federal cross-cutting regulations (also referred to as federal cross-cutters or CEQA-Plus). The basic rules for complying with cross-cutting federal authorities are set-out in the Clean Water State Revolving Fund regulations at 40 CFR § 35.3145 and in the Drinking Water State Revolving Fund regulations at 40 CFR § 35.3575.

This section describes the status of compliance with relevant federal laws, executive orders, and policies, and the consultation that has occurred to date or will occur in the near future. The topics are based in part on the SWRCB's State Revolving Fund Program Federal Cross-cutting Environmental Regulations Evaluation Form for Environmental Review and Federal Coordination. The State Revolving Fund Program is partially funded by the United States Environmental Protection Agency (USEPA). Therefore, the SWRCB must document projects meet the federal cross-cutters requirements.

Federal Endangered Species Act

Section 7 of the Federal Endangered Species Act requires federal agencies, in consultation with the Secretary of the Interior, to ensure their actions do not jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of the critical habitat of these species. Under Section 7, a project which could result in incidental take of a listed threatened or endangered species must consult with the USFWS to obtain a Biological Opinion. If the Biological Opinion finds the project could jeopardize the existence of a listed species ("jeopardy opinion"), the agency cannot authorize the project until it is modified to obtain a "nonjeopardy" opinion. For the purpose of this project, the SWRCB would act as the federal lead or responsible agency.

In June 2019, Rincon Consultants, Inc. conducted a Biological Resources Assessment, including a literature review and field reconnaissance survey to document existing site conditions and the potential presence of special-status biological resources, including plant and wildlife species, plant communities, jurisdictional waters and wetlands, and habitat for nesting birds. In September 2022, Rincon Consultants, Inc. updated the project-specific Biological Resources Assessment to include the modified project design (Appendix B). As discussed in the Biological Resources Assessment, no federally listed wildlife species have a moderate or high potential to occur within the project site. Furthermore, Mitigation Measures BIO-1 through BIO-6 would require measures such as construction disturbance minimization, pre-construction surveys, and biological construction monitoring, all of which would further reduce potential impacts to listed species. Thus, the project would not jeopardize listed species and the lead agency would be in compliance with the Federal Endangered Species Act.

National Historic Preservation Act, Section 106

The purpose of the National Historic Preservation Act (NHPA) is to protect, preserve, rehabilitate, or restore significant historical, archaeological, and cultural resources. Section 106 requires federal agencies to take into account effects on historic properties. Section 106 review involves a step-by-step procedure described in detail in the implementing regulations (36 CFR Part 800).

In June 2019 (and updated in January 2021), Rincon Consultants prepared a Cultural Resources Assessment for the proposed project (Appendix C). The analysis includes a Section 106 evaluation for the proposed project and can be submitted as part of the consultation process with the State Historic Preservation Officer (SHPO). Concurrence by the SHPO would ensure compliance with the NHPA.

The cultural resources records search, Native American outreach and historic group consultation, and field surveys resulted in the documentation of two newly identified built-environment resources, the Rincon Vent Building and Rincon Pumping Plant, located within the project area. The Cultural Resources Assessment also documents three previously recorded historic period built-environment resources, SR 192 (P-42-003622), Abbott Ranch (P-56-152756), and the Santa Clara-Ojai-Santa Barbara 66kV Transmission Line (P-56-153060), whose boundaries overlap with portions of the project area. The two newly identified resources do not meet any of the criteria for listing in the NRHP. No further management of these resources is recommended. Furthermore, each of the previously recorded resources has been previously recommended ineligible for listing in the NRHP. Updated historic resource evaluations conducted for the Cultural Resources Assessment identified one property, the Abbott Ranch, as eligible for local designation as a Ventura County Site of Merit. The property is not considered a historic property under Section 106 of the NHPA.

The proposed project would have no effect to historic properties under Section 106. Thus, the lead agency would be in compliance with Section 106 of the NHPA.

Federal Clean Air Act

The 1990 Amendment to Federal Clean Air Act (FCAA) Section 176 requires USEPA to promulgate rules to ensure federal actions conform to the appropriate SIP. These rules, known as the General Conformity Rule (40 CFR Parts 51.850–51.860 and 93.150–93.160), require any federal agency responsible for an action in a federal nonattainment/maintenance area to demonstrate conformity to the applicable SIP, by either determining the action is exempt from the General Conformity Rule requirements or subject to a formal conformity determination. Actions would be exempt, and thus conform to the SIP, if an applicability analysis shows the total direct and indirect emissions of nonattainment/maintenance pollutants from project construction and operation activities would be less than specified emission rate thresholds, known as *de minimis* levels. If not determined exempt, an air quality conformity analysis would be required to determine conformity.

A FCAA Conformity Analysis was prepared for the proposed project in August 2019 (Appendix F). The proposed project site is located within the SCCAB, which is a federal nonattainment area for 8-hour ozone. Therefore, the General Conformity Rule is applicable to the project emissions of ozone precursors (ROG and NO_X). Table 15 lists the total annual emissions that may be generated during construction of the proposed project. Table 15 also compares the total maximum worst-case annual emissions scenario (i.e., if all three construction types were to occur within the same year) to the applicable *de minimis* emission rates for the SCCAB region.

Table 15 Proposed Project Total Annual Construction Emissions

	Estimated Annual Construction Emissions (tons/year)					
	VOC	NO_X	CO	PM_{10}	$PM_{2.5}$	SO_2
Booster Pump Stations	<0.1	0.7	0.6	<0.1	<0.1	<0.1
Pipeline – Open Trench	<0.1	1.0	0.9	<0.1	<0.1	<0.1
Pipeline – Trenchless HDD	<0.1	0.3	0.2	<0.1	<0.1	<0.1
Maximum Worst-Case Scenario	**<0.1**	**2.0**	**1.7**	**<0.1**	**<0.1**	**<0.1**
De Minimis Thresholds	50	50	n/a	n/a	n/a	n/a
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

VOC: volatile organic compounds; NO_X: nitrogen oxides; CO: carbon monoxide; PM_{10}: particulate matter 10 microns or less in diameter; $PM_{2.5}$: particulate matter 2.5 microns or less in diameter; SO_2: sulfur dioxide

See Appendix F for FCAA Conformity Analysis and full modeling details.

As shown above, the project's criteria air pollutant emissions would not exceed the applicable *de minimis* rates. Therefore, the general conformity requirements do not apply to the project, and a formal conformity determination is not applicable to the project. Accordingly, the lead agency would be in compliance with the FCAA.

Coastal Zone Management Act

The Coastal Zone Management Act, passed by Congress in 1972 and managed by the National Oceanic and Atmospheric Administration's Office of Ocean and Coastal Resource Management, is designed to balance competing land and water issues in coastal zones. It also aims to "preserve, protect, develop, and where possible, to restore or enhance the resources of the nation's coastal zone." Within California, the Coastal Zone Management Act is administered by the Bay Conservation and Development Commission, the California Coastal Conservancy, and the California Coastal Commission.

A portion of the pipeline and BPS-A site are located within the coastal zone in both Ventura and Santa Barbara counties. Prior to construction, the project may require coastal development permits (CDPs) from the County of Ventura and the County of Santa Barbara. The project would be implemented consistent with applicable policies and ordinances to protect coastal biological resources, as discussed in the Biological Resources Assessment (Appendix B). Accordingly, the lead agency would be in compliance with the Coastal Zone Management Act.

Farmland Protection Policy Act

The Farmland Protection Policy Act requires a federal agency to consider the effects of its actions and programs on the nation's farmlands. The Farmland Protection Policy Act is intended to minimize the impact of federal programs with respect to the conversion of farmland to nonagricultural uses. It assures, to the extent possible, federal programs are administered to be compatible with State, local, and private programs and policies to protect farmland.

As discussed in Section 2, *Agriculture and Forestry Resources*, the pipeline alignment and booster pump station locations contain lands designated as Prime Farmland, Unique Farmland, and Farmland of Statewide Importance. The proposed pipeline would primarily be constructed underneath existing roadways, Caltrans rights-of-way, and previously disturbed, graded areas which are not currently in agricultural production. BPS-A would result in direct impacts to approximately 25,800 square feet of mapped Farmland. Such impacts would be minimized to the maximum extent

practicable, and the introduction of BPS-A would not preclude adjacent lands from continued agricultural production. The project would improve water reliability for Casitas customers, including agricultural producers. BPS-B would not result in the conversion of land currently used for agriculture into non-agricultural use as the BPS-B location is in previously disturbed areas not currently being used for agricultural purposes. Proposed improvements at existing Casitas infrastructure would not convert Farmland into non-agricultural use. Therefore, the proposed project would be consistent with State, local, and private programs and policies to protect farmland. The lead agency would be in compliance with the Farmland Protection Policy Act.

Executive Order 11988 – Floodplain Management

Executive Order (EO) 11988 requires federal agencies to recognize the values of floodplains and to consider the public benefits from restoring and preserving floodplains.

As described in Section 10, *Hydrology and Water Quality*, according to the FEMA Flood Insurance Rate Maps, areas of the project site near Lake Jocelyn and along Rincon Creek are located in Zone A, indicating an area subject to inundation by the 1-percent-annual-chance flood event (FEMA 2018a, 2018b, 2010a, 2010b). These areas include the eastern portion of the proposed pipeline alignment and the western portion of the BPS-A site. The pipeline would be constructed underground and generally within existing public and private road rights-of-way. The crossing of Rincon Creek would be accomplished using trenchless HDD construction. As such, pipeline construction would not permanently alter the drainage pattern of the project site and would not redirect flood flows. BPS-A would add a marginal amount of impervious surface area (approximately 420 square feet) in the flood zone due to construction of the weatherproof structure. This increase in impervious area would not substantially affect or redirect flood flows in the approximately 1,000-foot-wide floodplain, which currently contains numerous houses, ancillary structures, trees, and roadways of similar or larger scale. Therefore, impacts would be less than significant.

As such, the lead agency would be in compliance with this EO.

Federal Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and Executive Order 13168

The MBTA and the Bald and Golden Eagle Protection Act prohibit the take of migratory birds (or any part, nest, or eggs of any such bird) and the take and commerce of eagles. EO 13168 (Sep 22, 2000) requires any project with federal involvement to address impacts of federal actions on migratory birds.

As described in Section 4, *Biological Resources*, the BSA contains habitat which can support protected nesting birds, including raptors protected under the MBTA. The loss of a nest due to construction activities would be a violation of the MBTA. Implementation of Mitigation Measures BIO-1 and BIO-3 would reduce direct and indirect impacts to migratory bird species in compliance with the MBTA. Thus, the lead agency would be in compliance with the MBTA and this EO.

Executive Order 11990 – Protection of Wetlands

Under EO 11990 (May 24, 1977), federal agencies must avoid affecting wetlands unless it is determined no practicable alternative is available.

Impacts to Coyote Creek are not anticipated based on the proposed project footprint. Casitas Creek and the unnamed drainage tributary to Casitas Creek may be impacted by construction of BPS-B.

Impacts to these features would be significant without mitigation; however, implementation of Measures BIO-6 and BIO-7 would reduce potential impacts to a less-than-significant level.

The Rincon Creek crossing would be constructed using trenchless methods (HDD). This portion of Rincon Creek supports California sycamore woodland.

Indirect impacts from HDD and/or construction materials (e.g., stockpiled materials, construction equipment, and trash) which may be stored on site could adversely affect water quality (e.g., increased turbidity, altered pH, decreased dissolved oxygen levels, etc.) within the jurisdictional waters if runoff were to occur during storm events. Therefore, Mitigation Measures BIO-6 and BIO-7 are required to be implemented within 100 feet of Rincon Creek, Casitas Creek, Coyote Creek, and the unnamed drainage to avoid potential indirect impacts to water quality within these jurisdictional features. With implementation of these mitigation measures (and adherence to agency permits and existing regulations), potential indirect impacts to jurisdictional features would be reduced to a less-than-significant level.

Thus, the lead agency would be in compliance with EO 11990.

Wild and Scenic Rivers Act

The Wild and Scenic Rivers Act was passed in 1968 to preserve and protect designated rivers for their natural, cultural, and recreational value.

There are no designated Wild and Scenic Rivers within the project area, nor would any designated rivers be adversely affected by the proposed project. As a result, the Wild and Scenic Rivers Act does not apply to the proposed project.

Safe Drinking Water Act – Source Water Protection

Section 1424(e) of the Safe Drinking Water Act established the USEPA's Sole Source Aquifer Program. This program protects communities from groundwater contamination from federally-funded projects.

Within USEPA's Region 9, which includes California, there are nine sole source aquifers. None of these sole source aquifers are located within the project area. Therefore, the Sole Source Aquifer Program does not apply to the proposed project, and the lead agency would be in compliance with Section 1424(e) of the Safe Drinking Water Act.

Executive Order on Trails for America in the 21st Century

The EO on Trails for America (January 18, 2001) requires federal agencies to protect, connect, promote, and assist trails of all types throughout the United States.

According to Ventura County GIS data and Santa Barbara trail maps, no trails exist in the vicinity of the project components (County of Ventura 2020b; Santa Barbara Trail Guide 2013). As a result, no adverse effects on trails would occur and the lead agency is in compliance with this EO.

Executive Order 13007 – Indian Sacred Sites

Sacred sites are defined in Executive Order 13007 (May 24, 1996) as "any specific, discrete, narrowly delineated location on federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided

that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site."

The proposed project would not be located on or impact any federal lands and therefore would not affect any Native American sacred sites under this EO.

Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) of 1976 as amended (16 U.S.C. § 1801 et seq.), is the primary act governing federal management of fisheries in federal waters, from the 3-nautical-mile state territorial sea limit to the outer limit of the U.S. Exclusive Economic Zone. It establishes exclusive U.S. management authority over all fishing within the Exclusive Economic Zone, all anadromous fish throughout their migratory range except when in a foreign nation's waters, and all fish on the continental shelf. The Act also requires federal agencies to consult with NMFS on actions that could damage Essential Fish Habitat (EFH), as defined in the 1996 Sustainable Fisheries Act (Public Law 104-297).

The proposed project would not be located in or impact any U.S. federal waters regulated under the Magnuson-Stevens Act. EFH includes those habitats supporting the different life stages of each managed species. A single species may use many different habitats throughout its life to support breeding, spawning, nursery, feeding, and protection functions. EFH can consist of both the water column and the underlying surface (e.g., streambed) of a particular area. As described in the Biological Resources Assessment (Appendix B), no special status fish species are expected to occur in the project site. As described in Section 4, *Biological Resources*, the project is not expected to have adverse effect on resident or migratory fish, wildlife species, or fish habitat in the project site. As such, the lead agency is in compliance with this EO.

Environmental Justice

This section describes the existing socioeconomic resources in the proposed project area and the regulatory setting pertaining to environmental justice-related issues. This section also evaluates the potential for the proposed project to disproportionately affect minority or low-income groups. The USEPA defines environmental justice as: "The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means no group of people, including racial, ethnic, or economic groups should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, State, local, and tribal programs and policies" (USEPA 2016).

The pipeline would traverse the boundary between Ventura and Santa Barbara counties and act as a two-way intertie to allow the transfer of water between Casitas and CVWD, as necessary. The nearest city to the project site is Carpinteria. For the purposes of this environmental justice analysis, Carpinteria demographics are used to characterize the population in the vicinity of the project site.

Minority Population Analysis

According to USEPA guidelines, a minority population is present in a study area if the minority population of the affected area exceeds 50 percent, or if the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.

According to the United States Census Bureau's American Community Survey, approximately 78 percent of the population of Carpinteria identifies as white (non-minority). Consequently, the area surrounding the project components does not have a minority population exceeding 50 percent. The affected area could therefore not be identified as a minority population for the purposes of environmental justice analysis (United States Census Bureau 2022a).

Low-Income Analysis

USEPA guidelines recommend analyses of low-income communities to consider the United States Census Bureau's poverty level definitions, as well as applicable State and regional definitions of low-income and poverty communities.

DWR defines a Disadvantaged Community (DAC) as a community with a median household income (MHI) less than 80 percent of the California MHI. According to ACS data, the California statewide MHI in 2020 was $78,672 (United States Census Bureau 2022b). Therefore, a community would be considered to be a DAC if it has a MHI of less than $62,938. As provided in the ACS data, the MHI in Carpinteria was $74,868 (United States Census Bureau 2022b). Therefore, because the project area's MHI is greater than the threshold for a DAC, the project does not meet DWR's definition of low income/disadvantaged communities.

According to the United States Census poverty level definition, approximately 12.6 percent of the general population of California is considered to be in poverty (United States Census Bureau 2022b). In comparison, the percentage of persons in poverty in Carpinteria is approximately 7.6 percent (United States Census Bureau 2022b). Because the percentage of persons in poverty in Carpinteria does not exceed the percentages of persons in poverty statewide, the affected area does not meet the definition of a low-income community.

Conclusion

For the purposes of this analysis, an impact related to environmental justice would be significant if the proposed project would cause impacts to minority or low-income populations that are disproportionately high and adverse, either directly, indirectly, or cumulatively.

The project site and surrounding area does not meet state or federal thresholds for defining minority and low-income communities. The proposed project would allow the transfer of water between Casitas and CVWD. Although the construction of the pipelines has the potential for short-term effects (e.g., dust, traffic, and noise), the project would have the long-term benefit of increasing the resiliency of the local water distribution network and improving regional water supply reliability. These benefits would serve all residents in the project area regardless of race, ethnicity, or income level. Where potential impacts could occur, mitigation measures have been identified to reduce such effects to less-than-significant levels. The proposed project would therefore not result in any disproportionately high impacts on minority or low-income communities. Thus, no adverse environmental justice impacts would occur.

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Appendix A

Air Quality and Greenhouse Gas Modeling Results

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Pipeline

Ventura County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	38.10	1000sqft	0.87	38,100.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 7,100 LF of pipeline, and 520 LF of replacement pipeline and 5 foot wide trench. (7,620 feet x 5 feet = 38,100 feet squared)

Construction Phase - Adjusted construction schedule to meet applicant provided schedule

Off-road Equipment - Default construction equipment was used.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Trips and VMT - Information provided by the applicant

Grading - Data provided by the applicant

Architectural Coating -

Vehicle Trips -

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

Construction Off-road Equipment Mitigation - Per VCAPCD Rule 55

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	2286	2205
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	100.00	98.00
tblConstructionPhase	NumDays	2.00	38.00
tblConstructionPhase	NumDays	5.00	24.00
tblGrading	MaterialExported	0.00	2,900.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	77.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	16.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2342	2.0220	2.4525	5.2700e-003	0.1107	0.0911	0.2018	0.0535	0.0874	0.1408	0.0000	459.4913	459.4913	0.0912	2.5600e-003	462.5358
2024	5.4000e-003	0.0394	0.0552	9.0000e-005	9.4000e-004	1.8300e-003	2.7700e-003	2.5000e-004	1.7100e-003	1.9600e-003	0.0000	7.7580	7.7580	2.0700e-003	2.0000e-005	7.8151
Maximum	**0.2342**	**2.0220**	**2.4525**	**5.2700e-003**	**0.1107**	**0.0911**	**0.2018**	**0.0535**	**0.0874**	**0.1408**	**0.0000**	**459.4913**	**459.4913**	**0.0912**	**2.5600e-003**	**462.5358**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2342	2.0220	2.4525	5.2700e-003	0.0575	0.0911	0.1487	0.0262	0.0874	0.1135	0.0000	459.4908	459.4908	0.0912	2.5600e-003	462.5353
2024	5.4000e-003	0.0394	0.0552	9.0000e-005	9.4000e-004	1.8300e-003	2.7700e-003	2.5000e-004	1.7100e-003	1.9600e-003	0.0000	7.7580	7.7580	2.0700e-003	2.0000e-005	7.8151
Maximum	**0.2342**	**2.0220**	**2.4525**	**5.2700e-003**	**0.0575**	**0.0911**	**0.1487**	**0.0262**	**0.0874**	**0.1135**	**0.0000**	**459.4908**	**459.4908**	**0.0912**	**2.5600e-003**	**462.5353**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**47.62**	**0.00**	**25.98**	**50.86**	**0.00**	**19.13**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**6-12-2023**	**9-11-2023**	0.9228	0.9228
2	**9-12-2023**	**12-11-2023**	1.2107	1.2107
3	**12-12-2023**	**3-11-2024**	0.1629	0.1629
		Highest	1.2107	1.2107

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.0100e-003	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.8000e-004	6.8000e-004	0.0000	0.0000	7.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.0100e-003**	**0.0000**	**3.5000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**6.8000e-004**	**6.8000e-004**	**0.0000**	**0.0000**	**7.3000e-004**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.0100e-003	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.8000e-004	6.8000e-004	0.0000	0.0000	7.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.0100e-003**	**0.0000**	**3.5000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**6.8000e-004**	**6.8000e-004**	**0.0000**	**0.0000**	**7.3000e-004**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/12/2023	6/12/2023	5	1	
2	Excavation/Shoring	Grading	6/13/2023	8/3/2023	5	38	
3	Installation/Backfill	Building Construction	8/3/2023	12/18/2023	5	98	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Restoration	Paving	12/19/2023	1/19/2024	5	24	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 14.25

Acres of Paving: 0.87

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Excavation/Shoring	Bore/Drill Rigs	1	8.00	221	0.50
Excavation/Shoring	Concrete/Industrial Saws	1	8.00	81	0.73
Excavation/Shoring	Excavators	1	8.00	158	0.38
Excavation/Shoring	Graders	0	6.00	187	0.41
Excavation/Shoring	Off-Highway Trucks	1	8.00	402	0.38
Excavation/Shoring	Rubber Tired Dozers	1	6.00	247	0.40
Excavation/Shoring	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Installation/Backfill	Bore/Drill Rigs	1	8.00	221	0.50
Installation/Backfill	Cranes	1	4.00	231	0.29
Installation/Backfill	Excavators	1	8.00	158	0.38
Installation/Backfill	Forklifts	2	6.00	89	0.20
Installation/Backfill	Generator Sets	1	24.00	84	0.74
Installation/Backfill	Off-Highway Trucks	1	8.00	402	0.38
Installation/Backfill	Pumps	1	24.00	84	0.74
Installation/Backfill	Rollers	1	8.00	80	0.38

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Installation/Backfill	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Installation/Backfill	Welders	1	8.00	46	0.45
Restoration	Cement and Mortar Mixers	4	6.00	9	0.56
Restoration	Pavers	1	7.00	130	0.42
Restoration	Rollers	1	7.00	80	0.38
Restoration	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Excavation/Shoring	7	10.00	0.00	287.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Installation/Backfill	12	10.00	6.00	77.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration	7	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.2800e-003	0.0000	3.2800e-003	1.6800e-003	0.0000	1.6800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6000e-004	6.3900e-003	5.6100e-003	1.0000e-005		3.0000e-004	3.0000e-004		2.8000e-004	2.8000e-004	0.0000	0.9175	0.9175	2.2000e-004	0.0000	0.9231
Total	**6.6000e-004**	**6.3900e-003**	**5.6100e-003**	**1.0000e-005**	**3.2800e-003**	**3.0000e-004**	**3.5800e-003**	**1.6800e-003**	**2.8000e-004**	**1.9600e-003**	**0.0000**	**0.9175**	**0.9175**	**2.2000e-004**	**0.0000**	**0.9231**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0483	0.0483	0.0000	0.0000	0.0487
Total	**2.0000e-005**	**1.0000e-005**	**1.8000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0483**	**0.0483**	**0.0000**	**0.0000**	**0.0487**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.4700e-003	0.0000	1.4700e-003	7.6000e-004	0.0000	7.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6000e-004	6.3900e-003	5.6100e-003	1.0000e-005		3.0000e-004	3.0000e-004		2.8000e-004	2.8000e-004	0.0000	0.9175	0.9175	2.2000e-004	0.0000	0.9231
Total	**6.6000e-004**	**6.3900e-003**	**5.6100e-003**	**1.0000e-005**	**1.4700e-003**	**3.0000e-004**	**1.7700e-003**	**7.6000e-004**	**2.8000e-004**	**1.0400e-003**	**0.0000**	**0.9175**	**0.9175**	**2.2000e-004**	**0.0000**	**0.9231**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0483	0.0483	0.0000	0.0000	0.0487
Total	**2.0000e-005**	**1.0000e-005**	**1.8000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0483**	**0.0483**	**0.0000**	**0.0000**	**0.0487**

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3.3 Excavation/Shoring - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0934	0.0000	0.0934	0.0480	0.0000	0.0480	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0384	0.3377	0.3510	8.7000e-004		0.0147	0.0147		0.0137	0.0137	0.0000	76.4624	76.4624	0.0219	0.0000	77.0106
Total	**0.0384**	**0.3377**	**0.3510**	**8.7000e-004**	**0.0934**	**0.0147**	**0.1081**	**0.0480**	**0.0137**	**0.0617**	**0.0000**	**76.4624**	**76.4624**	**0.0219**	**0.0000**	**77.0106**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	0.0180	4.9300e-003	8.0000e-005	2.4600e-003	1.3000e-004	2.5900e-003	6.8000e-004	1.2000e-004	8.0000e-004	0.0000	8.1511	8.1511	5.5000e-004	1.3000e-003	8.5519
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.1000e-004	5.4000e-004	6.7800e-003	2.0000e-005	2.3800e-003	1.0000e-005	2.3900e-003	6.3000e-004	1.0000e-005	6.4000e-004	0.0000	1.8346	1.8346	5.0000e-005	5.0000e-005	1.8502
Total	**9.9000e-004**	**0.0185**	**0.0117**	**1.0000e-004**	**4.8400e-003**	**1.4000e-004**	**4.9800e-003**	**1.3100e-003**	**1.3000e-004**	**1.4400e-003**	**0.0000**	**9.9857**	**9.9857**	**6.0000e-004**	**1.3500e-003**	**10.4020**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation/Shoring - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0420	0.0000	0.0420	0.0216	0.0000	0.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0384	0.3377	0.3510	8.7000e-004		0.0147	0.0147		0.0137	0.0137	0.0000	76.4623	76.4623	0.0219	0.0000	77.0105
Total	**0.0384**	**0.3377**	**0.3510**	**8.7000e-004**	**0.0420**	**0.0147**	**0.0567**	**0.0216**	**0.0137**	**0.0353**	**0.0000**	**76.4623**	**76.4623**	**0.0219**	**0.0000**	**77.0105**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	0.0180	4.9300e-003	8.0000e-005	2.4600e-003	1.3000e-004	2.5900e-003	6.8000e-004	1.2000e-004	8.0000e-004	0.0000	8.1511	8.1511	5.5000e-004	1.3000e-003	8.5519
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.1000e-004	5.4000e-004	6.7800e-003	2.0000e-005	2.3800e-003	1.0000e-005	2.3900e-003	6.3000e-004	1.0000e-005	6.4000e-004	0.0000	1.8346	1.8346	5.0000e-005	5.0000e-005	1.8502
Total	**9.9000e-004**	**0.0185**	**0.0117**	**1.0000e-004**	**4.8400e-003**	**1.4000e-004**	**4.9800e-003**	**1.3100e-003**	**1.3000e-004**	**1.4400e-003**	**0.0000**	**9.9857**	**9.9857**	**6.0000e-004**	**1.3500e-003**	**10.4020**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1886	1.6175	2.0281	4.1100e-003		0.0747	0.0747		0.0720	0.0720	0.0000	355.6075	355.6075	0.0668	0.0000	357.2762
Total	**0.1886**	**1.6175**	**2.0281**	**4.1100e-003**		**0.0747**	**0.0747**		**0.0720**	**0.0720**	**0.0000**	**355.6075**	**355.6075**	**0.0668**	**0.0000**	**357.2762**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	4.8100e-003	1.3200e-003	2.0000e-005	6.6000e-004	3.0000e-005	7.0000e-004	1.8000e-004	3.0000e-005	2.1000e-004	0.0000	2.1869	2.1869	1.5000e-004	3.5000e-004	2.2944
Vendor	2.7000e-004	0.0108	3.8700e-003	5.0000e-005	1.7700e-003	6.0000e-005	1.8300e-003	5.1000e-004	6.0000e-005	5.7000e-004	0.0000	4.8875	4.8875	2.0000e-004	7.3000e-004	5.1106
Worker	1.8400e-003	1.3900e-003	0.0175	5.0000e-005	6.1400e-003	3.0000e-005	6.1800e-003	1.6300e-003	3.0000e-005	1.6600e-003	0.0000	4.7314	4.7314	1.2000e-004	1.2000e-004	4.7715
Total	**2.1900e-003**	**0.0170**	**0.0227**	**1.2000e-004**	**8.5700e-003**	**1.2000e-004**	**8.7100e-003**	**2.3200e-003**	**1.2000e-004**	**2.4400e-003**	**0.0000**	**11.8057**	**11.8057**	**4.7000e-004**	**1.2000e-003**	**12.1766**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1886	1.6175	2.0281	4.1100e-003		0.0747	0.0747		0.0720	0.0720	0.0000	355.6071	355.6071	0.0668	0.0000	357.2757
Total	**0.1886**	**1.6175**	**2.0281**	**4.1100e-003**		**0.0747**	**0.0747**		**0.0720**	**0.0720**	**0.0000**	**355.6071**	**355.6071**	**0.0668**	**0.0000**	**357.2757**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	4.8100e-003	1.3200e-003	2.0000e-005	6.6000e-004	3.0000e-005	7.0000e-004	1.8000e-004	3.0000e-005	2.1000e-004	0.0000	2.1869	2.1869	1.5000e-004	3.5000e-004	2.2944
Vendor	2.7000e-004	0.0108	3.8700e-003	5.0000e-005	1.7700e-003	6.0000e-005	1.8300e-003	5.1000e-004	6.0000e-005	5.7000e-004	0.0000	4.8875	4.8875	2.0000e-004	7.3000e-004	5.1106
Worker	1.8400e-003	1.3900e-003	0.0175	5.0000e-005	6.1400e-003	3.0000e-005	6.1800e-003	1.6300e-003	3.0000e-005	1.6600e-003	0.0000	4.7314	4.7314	1.2000e-004	1.2000e-004	4.7715
Total	**2.1900e-003**	**0.0170**	**0.0227**	**1.2000e-004**	**8.5700e-003**	**1.2000e-004**	**8.7100e-003**	**2.3200e-003**	**1.2000e-004**	**2.4400e-003**	**0.0000**	**11.8057**	**11.8057**	**4.7000e-004**	**1.2000e-003**	**12.1766**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.7500e-003	0.0248	0.0316	5.0000e-005		1.1900e-003	1.1900e-003		1.1100e-003	1.1100e-003	0.0000	4.2297	4.2297	1.2300e-003	0.0000	4.2605
Paving	4.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.1800e-003**	**0.0248**	**0.0316**	**5.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**4.2297**	**4.2297**	**1.2300e-003**	**0.0000**	**4.2605**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.3000e-004	1.6100e-003	0.0000	5.6000e-004	0.0000	5.7000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4345	0.4345	1.0000e-005	1.0000e-005	0.4382
Total	**1.7000e-004**	**1.3000e-004**	**1.6100e-003**	**0.0000**	**5.6000e-004**	**0.0000**	**5.7000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4345**	**0.4345**	**1.0000e-005**	**1.0000e-005**	**0.4382**

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3.5 Restoration - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.7500e-003	0.0248	0.0316	5.0000e-005		1.1900e-003	1.1900e-003		1.1100e-003	1.1100e-003	0.0000	4.2297	4.2297	1.2300e-003	0.0000	4.2605
Paving	4.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.1800e-003**	**0.0248**	**0.0316**	**5.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**4.2297**	**4.2297**	**1.2300e-003**	**0.0000**	**4.2605**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.3000e-004	1.6100e-003	0.0000	5.6000e-004	0.0000	5.7000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4345	0.4345	1.0000e-005	1.0000e-005	0.4382
Total	**1.7000e-004**	**1.3000e-004**	**1.6100e-003**	**0.0000**	**5.6000e-004**	**0.0000**	**5.7000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4345**	**0.4345**	**1.0000e-005**	**1.0000e-005**	**0.4382**

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3.5 Restoration - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4300e-003	0.0392	0.0527	8.0000e-005		1.8200e-003	1.8200e-003		1.7000e-003	1.7000e-003	0.0000	7.0505	7.0505	2.0500e-003	0.0000	7.1018
Paving	7.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.1400e-003**	**0.0392**	**0.0527**	**8.0000e-005**		**1.8200e-003**	**1.8200e-003**		**1.7000e-003**	**1.7000e-003**	**0.0000**	**7.0505**	**7.0505**	**2.0500e-003**	**0.0000**	**7.1018**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.9000e-004	2.4900e-003	1.0000e-005	9.4000e-004	0.0000	9.5000e-004	2.5000e-004	0.0000	2.5000e-004	0.0000	0.7076	0.7076	2.0000e-005	2.0000e-005	0.7133
Total	**2.6000e-004**	**1.9000e-004**	**2.4900e-003**	**1.0000e-005**	**9.4000e-004**	**0.0000**	**9.5000e-004**	**2.5000e-004**	**0.0000**	**2.5000e-004**	**0.0000**	**0.7076**	**0.7076**	**2.0000e-005**	**2.0000e-005**	**0.7133**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4300e-003	0.0392	0.0527	8.0000e-005		1.8200e-003	1.8200e-003		1.7000e-003	1.7000e-003	0.0000	7.0504	7.0504	2.0500e-003	0.0000	7.1018
Paving	7.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.1400e-003**	**0.0392**	**0.0527**	**8.0000e-005**		**1.8200e-003**	**1.8200e-003**		**1.7000e-003**	**1.7000e-003**	**0.0000**	**7.0504**	**7.0504**	**2.0500e-003**	**0.0000**	**7.1018**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.9000e-004	2.4900e-003	1.0000e-005	9.4000e-004	0.0000	9.5000e-004	2.5000e-004	0.0000	2.5000e-004	0.0000	0.7076	0.7076	2.0000e-005	2.0000e-005	0.7133
Total	**2.6000e-004**	**1.9000e-004**	**2.4900e-003**	**1.0000e-005**	**9.4000e-004**	**0.0000**	**9.5000e-004**	**2.5000e-004**	**0.0000**	**2.5000e-004**	**0.0000**	**0.7076**	**0.7076**	**2.0000e-005**	**2.0000e-005**	**0.7133**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.548670	0.058343	0.171689	0.130773	0.027316	0.007545	0.011806	0.006161	0.000681	0.000392	0.029028	0.000637	0.006958

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.0100e-003	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.8000e-004	6.8000e-004	0.0000	0.0000	7.3000e-004
Unmitigated	3.0100e-003	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.8000e-004	6.8000e-004	0.0000	0.0000	7.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.8000e-004	6.8000e-004	0.0000	0.0000	7.3000e-004
Total	**3.0000e-003**	**0.0000**	**3.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**6.8000e-004**	**6.8000e-004**	**0.0000**	**0.0000**	**7.3000e-004**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.8000e-004	6.8000e-004	0.0000	0.0000	7.3000e-004
Total	**3.0000e-003**	**0.0000**	**3.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**6.8000e-004**	**6.8000e-004**	**0.0000**	**0.0000**	**7.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Pipeline

Ventura County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	38.10	1000sqft	0.87	38,100.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 7,100 LF of pipeline, and 520 LF of replacement pipeline and 5 foot wide trench. (7,620 feet x 5 feet = 38,100 feet squared)

Construction Phase - Adjusted construction schedule to meet applicant provided schedule

Off-road Equipment - Default construction equipment was used.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Trips and VMT - Information provided by the applicant

Grading - Data provided by the applicant

Architectural Coating -

Vehicle Trips -

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

Construction Off-road Equipment Mitigation - Per VCAPCD Rule 55

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	2286	2205
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	100.00	98.00
tblConstructionPhase	NumDays	2.00	38.00
tblConstructionPhase	NumDays	5.00	24.00
tblGrading	MaterialExported	0.00	2,900.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	77.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	16.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.9657	52.0464	60.9727	0.1377	6.6801	2.3066	7.6586	3.4014	2.2002	4.8440	0.0000	13,288.6483	13,288.6483	2.8191	0.1048	13,390.3392
2024	0.7201	5.2521	7.3796	0.0123	0.1277	0.2435	0.3712	0.0339	0.2274	0.2613	0.0000	1,144.1998	1,144.1998	0.3042	2.4100e-003	1,152.5222
Maximum	**5.9657**	**52.0464**	**60.9727**	**0.1377**	**6.6801**	**2.3066**	**7.6586**	**3.4014**	**2.2002**	**4.8440**	**0.0000**	**13,288.6483**	**13,288.6483**	**2.8191**	**0.1048**	**13,390.3392**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.9657	52.0464	60.9727	0.1377	3.0763	2.3066	4.9557	1.5492	2.2002	3.4549	0.0000	13,288.6483	13,288.6483	2.8191	0.1048	13,390.3392
2024	0.7201	5.2521	7.3796	0.0123	0.1277	0.2435	0.3712	0.0339	0.2274	0.2613	0.0000	1,144.1998	1,144.1998	0.3042	2.4100e-003	1,152.5222
Maximum	**5.9657**	**52.0464**	**60.9727**	**0.1377**	**3.0763**	**2.3066**	**4.9557**	**1.5492**	**2.2002**	**3.4549**	**0.0000**	**13,288.6483**	**13,288.6483**	**2.8191**	**0.1048**	**13,390.3392**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	52.94	0.00	33.66	53.92	0.00	27.21	0.00	0.00	0.00	0.00	0.00	0.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0167	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0167**	**4.0000e-005**	**3.8800e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**		**8.3400e-003**	**8.3400e-003**	**2.0000e-005**	**0.0000**	**8.8800e-003**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0167	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0167**	**4.0000e-005**	**3.8800e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**		**8.3400e-003**	**8.3400e-003**	**2.0000e-005**	**0.0000**	**8.8800e-003**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/12/2023	6/12/2023	5	1	
2	Excavation/Shoring	Grading	6/13/2023	8/3/2023	5	38	
3	Installation/Backfill	Building Construction	8/3/2023	12/18/2023	5	98	
4	Restoration	Paving	12/19/2023	1/19/2024	5	24	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 14.25

Acres of Paving: 0.87

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Excavation/Shoring	Bore/Drill Rigs	1	8.00	221	0.50
Excavation/Shoring	Concrete/Industrial Saws	1	8.00	81	0.73
Excavation/Shoring	Excavators	1	8.00	158	0.38

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Excavation/Shoring	Graders	0	6.00	187	0.41
Excavation/Shoring	Off-Highway Trucks	1	8.00	402	0.38
Excavation/Shoring	Rubber Tired Dozers	1	6.00	247	0.40
Excavation/Shoring	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Installation/Backfill	Bore/Drill Rigs	1	8.00	221	0.50
Installation/Backfill	Cranes	1	4.00	231	0.29
Installation/Backfill	Excavators	1	8.00	158	0.38
Installation/Backfill	Forklifts	2	6.00	89	0.20
Installation/Backfill	Generator Sets	1	24.00	84	0.74
Installation/Backfill	Off-Highway Trucks	1	8.00	402	0.38
Installation/Backfill	Pumps	1	24.00	84	0.74
Installation/Backfill	Rollers	1	8.00	80	0.38
Installation/Backfill	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Installation/Backfill	Welders	1	8.00	46	0.45
Restoration	Cement and Mortar Mixers	4	6.00	9	0.56
Restoration	Pavers	1	7.00	130	0.42
Restoration	Rollers	1	7.00	80	0.38
Restoration	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Excavation/Shoring	7	10.00	0.00	287.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Installation/Backfill	12	10.00	6.00	77.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration	7	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.3211	12.7828	11.2264	0.0210		0.6008	0.6008		0.5630	0.5630		2,022.8194	2,022.8194	0.4917		2,035.1129
Total	**1.3211**	**12.7828**	**11.2264**	**0.0210**	**6.5523**	**0.6008**	**7.1532**	**3.3675**	**0.5630**	**3.9305**		**2,022.8194**	**2,022.8194**	**0.4917**		**2,035.1129**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0372	0.0250	0.3744	1.0800e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		110.5038	110.5038	2.6100e-003	2.5900e-003	111.3394
Total	**0.0372**	**0.0250**	**0.3744**	**1.0800e-003**	**0.1277**	**6.7000e-004**	**0.1284**	**0.0339**	**6.1000e-004**	**0.0345**		**110.5038**	**110.5038**	**2.6100e-003**	**2.5900e-003**	**111.3394**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.3211	12.7828	11.2264	0.0210		0.6008	0.6008		0.5630	0.5630	0.0000	2,022.8194	2,022.8194	0.4917		2,035.1129
Total	**1.3211**	**12.7828**	**11.2264**	**0.0210**	**2.9486**	**0.6008**	**3.5494**	**1.5154**	**0.5630**	**2.0784**	**0.0000**	**2,022.8194**	**2,022.8194**	**0.4917**		**2,035.1129**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0372	0.0250	0.3744	1.0800e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		110.5038	110.5038	2.6100e-003	2.5900e-003	111.3394
Total	**0.0372**	**0.0250**	**0.3744**	**1.0800e-003**	**0.1277**	**6.7000e-004**	**0.1284**	**0.0339**	**6.1000e-004**	**0.0345**		**110.5038**	**110.5038**	**2.6100e-003**	**2.5900e-003**	**111.3394**

3.3 Excavation/Shoring - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	2.0198	17.7731	18.4711	0.0460		0.7725	0.7725		0.7210	0.7210		4,436.0725	4,436.0725	1.2722		4,467.8784
Total	**2.0198**	**17.7731**	**18.4711**	**0.0460**	**4.9143**	**0.7725**	**5.6867**	**2.5256**	**0.7210**	**3.2466**		**4,436.0725**	**4,436.0725**	**1.2722**		**4,467.8784**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation/Shoring - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0152	0.9062	0.2580	4.2600e-003	0.1319	6.6700e-003	0.1385	0.0361	6.3800e-003	0.0425		472.7155	472.7155	0.0322	0.0753	495.9580
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0372	0.0250	0.3744	1.0800e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		110.5038	110.5038	2.6100e-003	2.5900e-003	111.3394
Total	**0.0524**	**0.9312**	**0.6324**	**5.3400e-003**	**0.2596**	**7.3400e-003**	**0.2669**	**0.0700**	**6.9900e-003**	**0.0770**		**583.2193**	**583.2193**	**0.0348**	**0.0779**	**607.2974**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2114	0.0000	2.2114	1.1365	0.0000	1.1365			0.0000			0.0000
Off-Road	2.0198	17.7731	18.4711	0.0460		0.7725	0.7725		0.7210	0.7210	0.0000	4,436.0725	4,436.0725	1.2722		4,467.8784
Total	**2.0198**	**17.7731**	**18.4711**	**0.0460**	**2.2114**	**0.7725**	**2.9839**	**1.1365**	**0.7210**	**1.8575**	**0.0000**	**4,436.0725**	**4,436.0725**	**1.2722**		**4,467.8784**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation/Shoring - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0152	0.9062	0.2580	4.2600e-003	0.1319	6.6700e-003	0.1385	0.0361	6.3800e-003	0.0425		472.7155	472.7155	0.0322	0.0753	495.9580
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0372	0.0250	0.3744	1.0800e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		110.5038	110.5038	2.6100e-003	2.5900e-003	111.3394
Total	**0.0524**	**0.9312**	**0.6324**	**5.3400e-003**	**0.2596**	**7.3400e-003**	**0.2669**	**0.0700**	**6.9900e-003**	**0.0770**		**583.2193**	**583.2193**	**0.0348**	**0.0779**	**607.2974**

3.4 Installation/Backfill - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.8491	33.0106	41.3903	0.0839		1.5242	1.5242		1.4698	1.4698		7,999.7991	7,999.7991	1.5016		8,037.3379
Total	**3.8491**	**33.0106**	**41.3903**	**0.0839**		**1.5242**	**1.5242**		**1.4698**	**1.4698**		**7,999.7991**	**7,999.7991**	**1.5016**		**8,037.3379**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5900e-003	0.0943	0.0268	4.4000e-004	0.0137	6.9000e-004	0.0144	3.7600e-003	6.6000e-004	4.4200e-003		49.1775	49.1775	3.3500e-003	7.8300e-003	51.5954
Vendor	5.7200e-003	0.2121	0.0777	1.0100e-003	0.0367	1.2300e-003	0.0380	0.0106	1.1700e-003	0.0117		109.8762	109.8762	4.5200e-003	0.0165	114.8908
Worker	0.0372	0.0250	0.3744	1.0800e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		110.5038	110.5038	2.6100e-003	2.5900e-003	111.3394
Total	**0.0445**	**0.3314**	**0.4790**	**2.5300e-003**	**0.1782**	**2.5900e-003**	**0.1808**	**0.0482**	**2.4400e-003**	**0.0507**		**269.5575**	**269.5575**	**0.0105**	**0.0269**	**277.8256**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.8491	33.0106	41.3903	0.0839		1.5242	1.5242		1.4698	1.4698	0.0000	7,999.7991	7,999.7991	1.5016		8,037.3379
Total	**3.8491**	**33.0106**	**41.3903**	**0.0839**		**1.5242**	**1.5242**		**1.4698**	**1.4698**	**0.0000**	**7,999.7991**	**7,999.7991**	**1.5016**		**8,037.3379**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5900e-003	0.0943	0.0268	4.4000e-004	0.0137	6.9000e-004	0.0144	3.7600e-003	6.6000e-004	4.4200e-003		49.1775	49.1775	3.3500e-003	7.8300e-003	51.5954
Vendor	5.7200e-003	0.2121	0.0777	1.0100e-003	0.0367	1.2300e-003	0.0380	0.0106	1.1700e-003	0.0117		109.8762	109.8762	4.5200e-003	0.0165	114.8908
Worker	0.0372	0.0250	0.3744	1.0800e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		110.5038	110.5038	2.6100e-003	2.5900e-003	111.3394
Total	**0.0445**	**0.3314**	**0.4790**	**2.5300e-003**	**0.1782**	**2.5900e-003**	**0.1808**	**0.0482**	**2.4400e-003**	**0.0507**		**269.5575**	**269.5575**	**0.0105**	**0.0269**	**277.8256**

3.5 Restoration - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7061**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**		**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0372	0.0250	0.3744	1.0800e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		110.5038	110.5038	2.6100e-003	2.5900e-003	111.3394
Total	**0.0372**	**0.0250**	**0.3744**	**1.0800e-003**	**0.1277**	**6.7000e-004**	**0.1284**	**0.0339**	**6.1000e-004**	**0.0345**		**110.5038**	**110.5038**	**2.6100e-003**	**2.5900e-003**	**111.3394**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7061**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**	**0.0000**	**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0372	0.0250	0.3744	1.0800e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		110.5038	110.5038	2.6100e-003	2.5900e-003	111.3394
Total	**0.0372**	**0.0250**	**0.3744**	**1.0800e-003**	**0.1277**	**6.7000e-004**	**0.1284**	**0.0339**	**6.1000e-004**	**0.0345**		**110.5038**	**110.5038**	**2.6100e-003**	**2.5900e-003**	**111.3394**

3.5 Restoration - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269		1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6853**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**		**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0348	0.0224	0.3482	1.0500e-003	0.1277	6.4000e-004	0.1284	0.0339	5.9000e-004	0.0345		107.9606	107.9606	2.3700e-003	2.4100e-003	108.7364
Total	**0.0348**	**0.0224**	**0.3482**	**1.0500e-003**	**0.1277**	**6.4000e-004**	**0.1284**	**0.0339**	**5.9000e-004**	**0.0345**		**107.9606**	**107.9606**	**2.3700e-003**	**2.4100e-003**	**108.7364**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269	0.0000	1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6853**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**	**0.0000**	**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0348	0.0224	0.3482	1.0500e-003	0.1277	6.4000e-004	0.1284	0.0339	5.9000e-004	0.0345		107.9606	107.9606	2.3700e-003	2.4100e-003	108.7364
Total	**0.0348**	**0.0224**	**0.3482**	**1.0500e-003**	**0.1277**	**6.4000e-004**	**0.1284**	**0.0339**	**5.9000e-004**	**0.0345**		**107.9606**	**107.9606**	**2.3700e-003**	**2.4100e-003**	**108.7364**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.548670	0.058343	0.171689	0.130773	0.027316	0.007545	0.011806	0.006161	0.000681	0.000392	0.029028	0.000637	0.006958

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0167	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003
Unmitigated	0.0167	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.8000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0135					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.6000e-004	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003
Total	**0.0167**	**4.0000e-005**	**3.8800e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**8.3400e-003**	**8.3400e-003**	**2.0000e-005**		**8.8800e-003**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.8000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0135					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.6000e-004	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003
Total	**0.0167**	**4.0000e-005**	**3.8800e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**8.3400e-003**	**8.3400e-003**	**2.0000e-005**		**8.8800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Pipeline

Ventura County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	38.10	1000sqft	0.87	38,100.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 7,100 LF of pipeline, and 520 LF of replacement pipeline and 5 foot wide trench. (7,620 feet x 5 feet = 38,100 feet squared)

Construction Phase - Adjusted construction schedule to meet applicant provided schedule

Off-road Equipment - Default construction equipment was used.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Trips and VMT - Information provided by the applicant

Grading - Data provided by the applicant

Architectural Coating -

Vehicle Trips -

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

Construction Off-road Equipment Mitigation - Per VCAPCD Rule 55

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	2286	2205
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	100.00	98.00
tblConstructionPhase	NumDays	2.00	38.00
tblConstructionPhase	NumDays	5.00	24.00
tblGrading	MaterialExported	0.00	2,900.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	77.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	16.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.9730	52.1069	60.9475	0.1376	6.6801	2.3066	7.6586	3.4014	2.2002	4.8440	0.0000	13,279.6391	13,279.6391	2.8193	0.1054	13,381.5418
2024	0.7242	5.2559	7.3653	0.0123	0.1277	0.2435	0.3712	0.0339	0.2274	0.2613	0.0000	1,139.4905	1,139.4905	0.3044	2.6700e-003	1,147.8957
Maximum	**5.9730**	**52.1069**	**60.9475**	**0.1376**	**6.6801**	**2.3066**	**7.6586**	**3.4014**	**2.2002**	**4.8440**	**0.0000**	**13,279.6391**	**13,279.6391**	**2.8193**	**0.1054**	**13,381.5418**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.9730	52.1069	60.9475	0.1376	3.0763	2.3066	4.9558	1.5492	2.2002	3.4549	0.0000	13,279.6391	13,279.6391	2.8193	0.1054	13,381.5418
2024	0.7242	5.2559	7.3653	0.0123	0.1277	0.2435	0.3712	0.0339	0.2274	0.2613	0.0000	1,139.4905	1,139.4905	0.3044	2.6700e-003	1,147.8957
Maximum	**5.9730**	**52.1069**	**60.9475**	**0.1376**	**3.0763**	**2.3066**	**4.9558**	**1.5492**	**2.2002**	**3.4549**	**0.0000**	**13,279.6391**	**13,279.6391**	**2.8193**	**0.1054**	**13,381.5418**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	52.94	0.00	33.66	53.92	0.00	27.21	0.00	0.00	0.00	0.00	0.00	0.00

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0167	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0167**	**4.0000e-005**	**3.8800e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**		**8.3400e-003**	**8.3400e-003**	**2.0000e-005**	**0.0000**	**8.8800e-003**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0167	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0167**	**4.0000e-005**	**3.8800e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**		**8.3400e-003**	**8.3400e-003**	**2.0000e-005**	**0.0000**	**8.8800e-003**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/12/2023	6/12/2023	5	1	
2	Excavation/Shoring	Grading	6/13/2023	8/3/2023	5	38	
3	Installation/Backfill	Building Construction	8/3/2023	12/18/2023	5	98	
4	Restoration	Paving	12/19/2023	1/19/2024	5	24	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 14.25

Acres of Paving: 0.87

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Excavation/Shoring	Bore/Drill Rigs	1	8.00	221	0.50
Excavation/Shoring	Concrete/Industrial Saws	1	8.00	81	0.73
Excavation/Shoring	Excavators	1	8.00	158	0.38

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Excavation/Shoring	Graders	0	6.00	187	0.41
Excavation/Shoring	Off-Highway Trucks	1	8.00	402	0.38
Excavation/Shoring	Rubber Tired Dozers	1	6.00	247	0.40
Excavation/Shoring	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Installation/Backfill	Bore/Drill Rigs	1	8.00	221	0.50
Installation/Backfill	Cranes	1	4.00	231	0.29
Installation/Backfill	Excavators	1	8.00	158	0.38
Installation/Backfill	Forklifts	2	6.00	89	0.20
Installation/Backfill	Generator Sets	1	24.00	84	0.74
Installation/Backfill	Off-Highway Trucks	1	8.00	402	0.38
Installation/Backfill	Pumps	1	24.00	84	0.74
Installation/Backfill	Rollers	1	8.00	80	0.38
Installation/Backfill	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Installation/Backfill	Welders	1	8.00	46	0.45
Restoration	Cement and Mortar Mixers	4	6.00	9	0.56
Restoration	Pavers	1	7.00	130	0.42
Restoration	Rollers	1	7.00	80	0.38
Restoration	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Excavation/Shoring	7	10.00	0.00	287.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Installation/Backfill	12	10.00	6.00	77.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration	7	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.3211	12.7828	11.2264	0.0210		0.6008	0.6008		0.5630	0.5630		2,022.8194	2,022.8194	0.4917		2,035.1129
Total	**1.3211**	**12.7828**	**11.2264**	**0.0210**	**6.5523**	**0.6008**	**7.1532**	**3.3675**	**0.5630**	**3.9305**		**2,022.8194**	**2,022.8194**	**0.4917**		**2,035.1129**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0414	0.0293	0.3586	1.0300e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		105.6747	105.6747	2.7500e-003	2.8700e-003	106.5997
Total	**0.0414**	**0.0293**	**0.3586**	**1.0300e-003**	**0.1277**	**6.7000e-004**	**0.1284**	**0.0339**	**6.1000e-004**	**0.0345**		**105.6747**	**105.6747**	**2.7500e-003**	**2.8700e-003**	**106.5997**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.3211	12.7828	11.2264	0.0210		0.6008	0.6008		0.5630	0.5630	0.0000	2,022.8194	2,022.8194	0.4917		2,035.1129
Total	**1.3211**	**12.7828**	**11.2264**	**0.0210**	**2.9486**	**0.6008**	**3.5494**	**1.5154**	**0.5630**	**2.0784**	**0.0000**	**2,022.8194**	**2,022.8194**	**0.4917**		**2,035.1129**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0414	0.0293	0.3586	1.0300e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		105.6747	105.6747	2.7500e-003	2.8700e-003	106.5997
Total	**0.0414**	**0.0293**	**0.3586**	**1.0300e-003**	**0.1277**	**6.7000e-004**	**0.1284**	**0.0339**	**6.1000e-004**	**0.0345**		**105.6747**	**105.6747**	**2.7500e-003**	**2.8700e-003**	**106.5997**

3.3 Excavation/Shoring - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	2.0198	17.7731	18.4711	0.0460		0.7725	0.7725		0.7210	0.7210		4,436.0725	4,436.0725	1.2722		4,467.8784
Total	**2.0198**	**17.7731**	**18.4711**	**0.0460**	**4.9143**	**0.7725**	**5.6867**	**2.5256**	**0.7210**	**3.2466**		**4,436.0725**	**4,436.0725**	**1.2722**		**4,467.8784**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation/Shoring - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0143	0.9447	0.2615	4.2600e-003	0.1319	6.6900e-003	0.1385	0.0361	6.4000e-003	0.0425		473.1469	473.1469	0.0321	0.0754	496.4091
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0414	0.0293	0.3586	1.0300e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		105.6747	105.6747	2.7500e-003	2.8700e-003	106.5997
Total	**0.0557**	**0.9740**	**0.6201**	**5.2900e-003**	**0.2596**	**7.3600e-003**	**0.2669**	**0.0700**	**7.0100e-003**	**0.0770**		**578.8216**	**578.8216**	**0.0349**	**0.0782**	**603.0088**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2114	0.0000	2.2114	1.1365	0.0000	1.1365			0.0000			0.0000
Off-Road	2.0198	17.7731	18.4711	0.0460		0.7725	0.7725		0.7210	0.7210	0.0000	4,436.0725	4,436.0725	1.2722		4,467.8784
Total	**2.0198**	**17.7731**	**18.4711**	**0.0460**	**2.2114**	**0.7725**	**2.9839**	**1.1365**	**0.7210**	**1.8575**	**0.0000**	**4,436.0725**	**4,436.0725**	**1.2722**		**4,467.8784**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation/Shoring - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0143	0.9447	0.2615	4.2600e-003	0.1319	6.6900e-003	0.1385	0.0361	6.4000e-003	0.0425		473.1469	473.1469	0.0321	0.0754	496.4091
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0414	0.0293	0.3586	1.0300e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		105.6747	105.6747	2.7500e-003	2.8700e-003	106.5997
Total	**0.0557**	**0.9740**	**0.6201**	**5.2900e-003**	**0.2596**	**7.3600e-003**	**0.2669**	**0.0700**	**7.0100e-003**	**0.0770**		**578.8216**	**578.8216**	**0.0349**	**0.0782**	**603.0088**

3.4 Installation/Backfill - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.8491	33.0106	41.3903	0.0839		1.5242	1.5242		1.4698	1.4698		7,999.7991	7,999.7991	1.5016		8,037.3379
Total	**3.8491**	**33.0106**	**41.3903**	**0.0839**		**1.5242**	**1.5242**		**1.4698**	**1.4698**		**7,999.7991**	**7,999.7991**	**1.5016**		**8,037.3379**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4900e-003	0.0983	0.0272	4.4000e-004	0.0137	7.0000e-004	0.0144	3.7600e-003	6.7000e-004	4.4200e-003		49.2224	49.2224	3.3400e-003	7.8400e-003	51.6424
Vendor	5.4900e-003	0.2216	0.0804	1.0100e-003	0.0367	1.2300e-003	0.0380	0.0106	1.1800e-003	0.0118		110.0489	110.0489	4.5000e-003	0.0165	115.0746
Worker	0.0414	0.0293	0.3586	1.0300e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		105.6747	105.6747	2.7500e-003	2.8700e-003	106.5997
Total	**0.0484**	**0.3491**	**0.4662**	**2.4800e-003**	**0.1782**	**2.6000e-003**	**0.1808**	**0.0482**	**2.4600e-003**	**0.0507**		**264.9460**	**264.9460**	**0.0106**	**0.0272**	**273.3167**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.8491	33.0106	41.3903	0.0839		1.5242	1.5242		1.4698	1.4698	0.0000	7,999.7991	7,999.7991	1.5016		8,037.3379
Total	**3.8491**	**33.0106**	**41.3903**	**0.0839**		**1.5242**	**1.5242**		**1.4698**	**1.4698**	**0.0000**	**7,999.7991**	**7,999.7991**	**1.5016**		**8,037.3379**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4900e-003	0.0983	0.0272	4.4000e-004	0.0137	7.0000e-004	0.0144	3.7600e-003	6.7000e-004	4.4200e-003		49.2224	49.2224	3.3400e-003	7.8400e-003	51.6424
Vendor	5.4900e-003	0.2216	0.0804	1.0100e-003	0.0367	1.2300e-003	0.0380	0.0106	1.1800e-003	0.0118		110.0489	110.0489	4.5000e-003	0.0165	115.0746
Worker	0.0414	0.0293	0.3586	1.0300e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		105.6747	105.6747	2.7500e-003	2.8700e-003	106.5997
Total	**0.0484**	**0.3491**	**0.4662**	**2.4800e-003**	**0.1782**	**2.6000e-003**	**0.1808**	**0.0482**	**2.4600e-003**	**0.0507**		**264.9460**	**264.9460**	**0.0106**	**0.0272**	**273.3167**

3.5 Restoration - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7061**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**		**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0414	0.0293	0.3586	1.0300e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		105.6747	105.6747	2.7500e-003	2.8700e-003	106.5997
Total	**0.0414**	**0.0293**	**0.3586**	**1.0300e-003**	**0.1277**	**6.7000e-004**	**0.1284**	**0.0339**	**6.1000e-004**	**0.0345**		**105.6747**	**105.6747**	**2.7500e-003**	**2.8700e-003**	**106.5997**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7061**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**	**0.0000**	**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0414	0.0293	0.3586	1.0300e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		105.6747	105.6747	2.7500e-003	2.8700e-003	106.5997
Total	**0.0414**	**0.0293**	**0.3586**	**1.0300e-003**	**0.1277**	**6.7000e-004**	**0.1284**	**0.0339**	**6.1000e-004**	**0.0345**		**105.6747**	**105.6747**	**2.7500e-003**	**2.8700e-003**	**106.5997**

3.5 Restoration - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269		1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6853**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**		**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0388	0.0262	0.3340	1.0000e-003	0.1277	6.4000e-004	0.1284	0.0339	5.9000e-004	0.0345		103.2512	103.2512	2.5000e-003	2.6700e-003	104.1100
Total	**0.0388**	**0.0262**	**0.3340**	**1.0000e-003**	**0.1277**	**6.4000e-004**	**0.1284**	**0.0339**	**5.9000e-004**	**0.0345**		**103.2512**	**103.2512**	**2.5000e-003**	**2.6700e-003**	**104.1100**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269	0.0000	1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6853**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**	**0.0000**	**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0388	0.0262	0.3340	1.0000e-003	0.1277	6.4000e-004	0.1284	0.0339	5.9000e-004	0.0345		103.2512	103.2512	2.5000e-003	2.6700e-003	104.1100
Total	**0.0388**	**0.0262**	**0.3340**	**1.0000e-003**	**0.1277**	**6.4000e-004**	**0.1284**	**0.0339**	**5.9000e-004**	**0.0345**		**103.2512**	**103.2512**	**2.5000e-003**	**2.6700e-003**	**104.1100**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.548670	0.058343	0.171689	0.130773	0.027316	0.007545	0.011806	0.006161	0.000681	0.000392	0.029028	0.000637	0.006958

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0167	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003
Unmitigated	0.0167	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.8000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0135					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.6000e-004	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003
Total	**0.0167**	**4.0000e-005**	**3.8800e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**8.3400e-003**	**8.3400e-003**	**2.0000e-005**		**8.8800e-003**

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.8000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0135					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.6000e-004	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003
Total	**0.0167**	**4.0000e-005**	**3.8800e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**8.3400e-003**	**8.3400e-003**	**2.0000e-005**		**8.8800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

VTA-SB Counties Intertie Project - Pipeline - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Temporary Pump Station A

South Central Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	0.42	1000sqft	0.01	418.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on the dimensions of the temporary booster pump station. (22 feet by 19 feet = 418 square feet ground distrubance)

Construction Phase - Adjusted construction schedule to meet applicant provided schedule. Assume no paving and architectural coating for temporary pump station.

Trips and VMT - Worker trips provided by the applicant.

Grading -

Off-road Equipment - Equipment list provided by the applicant.

Construction Off-road Equipment Mitigation - Per VCAPCD Rule 55.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	6.1320e-003	6.0550e-003
tblFleetMix	LDA	0.52	0.51

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT2	0.19	0.19
tblFleetMix	LHD1	0.03	0.03
tblFleetMix	LHD2	7.8410e-003	7.9830e-003
tblFleetMix	MCY	0.03	0.03
tblFleetMix	MDV	0.14	0.14
tblFleetMix	MH	6.1180e-003	6.4500e-003
tblFleetMix	MHD	0.01	0.01
tblFleetMix	OBUS	8.2400e-004	8.3700e-004
tblFleetMix	SBUS	1.5440e-003	1.5630e-003
tblFleetMix	UBUS	4.4200e-004	4.4600e-004
tblLandUse	LandUseSquareFeet	420.00	418.00
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblTripsAndVMT	WorkerTripNumber	8.00	10.00
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	6.17	6.14
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	6.4060e-003	6.1290e-003
tblVehicleEF	HHD	1,034.77	1,047.01
tblVehicleEF	HHD	1,402.11	1,426.18
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.16	0.17
tblVehicleEF	HHD	0.22	0.23
tblVehicleEF	HHD	2.6000e-005	3.2000e-005
tblVehicleEF	HHD	5.48	5.52
tblVehicleEF	HHD	2.85	2.92
tblVehicleEF	HHD	2.49	2.48
tblVehicleEF	HHD	3.3150e-003	3.4930e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	2.0000e-006
tblVehicleEF	HHD	3.1710e-003	3.3420e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7930e-003	8.7900e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	3.0000e-006	4.0000e-006
tblVehicleEF	HHD	1.9700e-004	2.5200e-004
tblVehicleEF	HHD	0.42	0.42
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.4000e-005	1.2600e-004
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	9.5520e-003	9.6730e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	3.0000e-006	4.0000e-006
tblVehicleEF	HHD	1.9700e-004	2.5200e-004
tblVehicleEF	HHD	0.48	0.48
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	0.12	0.12
tblVehicleEF	HHD	8.4000e-005	1.2600e-004
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	6.08	6.05
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	5.9790e-003	5.7210e-003
tblVehicleEF	HHD	1,024.20	1,036.61

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	1,402.11	1,426.18
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.16	0.16
tblVehicleEF	HHD	0.22	0.23
tblVehicleEF	HHD	2.5000e-005	3.1000e-005
tblVehicleEF	HHD	5.26	5.30
tblVehicleEF	HHD	2.74	2.81
tblVehicleEF	HHD	2.49	2.48
tblVehicleEF	HHD	2.8760e-003	3.0250e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	2.0000e-006
tblVehicleEF	HHD	2.7510e-003	2.8940e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7930e-003	8.7900e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	6.0000e-006	7.0000e-006
tblVehicleEF	HHD	1.9800e-004	2.5200e-004
tblVehicleEF	HHD	0.44	0.44
tblVehicleEF	HHD	4.0000e-006	5.0000e-006
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.2000e-005	1.2200e-004
tblVehicleEF	HHD	9.4530e-003	9.5760e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.0000e-006	7.0000e-006
tblVehicleEF	HHD	1.9800e-004	2.5200e-004
tblVehicleEF	HHD	0.51	0.51
tblVehicleEF	HHD	4.0000e-006	5.0000e-006

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.12	0.12
tblVehicleEF	HHD	8.2000e-005	1.2200e-004
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	0.00	1.0000e-006
tblVehicleEF	HHD	6.30	6.27
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	6.6800e-003	6.3920e-003
tblVehicleEF	HHD	1,049.38	1,061.39
tblVehicleEF	HHD	1,402.11	1,426.18
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.17	0.17
tblVehicleEF	HHD	0.22	0.23
tblVehicleEF	HHD	2.7000e-005	3.3000e-005
tblVehicleEF	HHD	5.79	5.83
tblVehicleEF	HHD	2.82	2.89
tblVehicleEF	HHD	2.49	2.48
tblVehicleEF	HHD	3.9220e-003	4.1380e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	2.0000e-006
tblVehicleEF	HHD	3.7520e-003	3.9590e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7930e-003	8.7900e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	2.1900e-004	2.8300e-004

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.38	0.38
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	9.1000e-005	1.3500e-004
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	9.6880e-003	9.8080e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	2.1900e-004	2.8300e-004
tblVehicleEF	HHD	0.44	0.44
tblVehicleEF	HHD	0.12	0.12
tblVehicleEF	HHD	9.1000e-005	1.3500e-004
tblVehicleEF	LDA	1.8920e-003	2.1510e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.54	0.58
tblVehicleEF	LDA	2.15	2.23
tblVehicleEF	LDA	243.01	248.89
tblVehicleEF	LDA	51.93	53.20
tblVehicleEF	LDA	4.2670e-003	4.5780e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.18	0.19
tblVehicleEF	LDA	1.3730e-003	1.4360e-003
tblVehicleEF	LDA	1.7560e-003	1.8310e-003
tblVehicleEF	LDA	1.2650e-003	1.3240e-003
tblVehicleEF	LDA	1.6140e-003	1.6840e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	7.2190e-003	8.3800e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.21	0.23
tblVehicleEF	LDA	2.3550e-003	2.4310e-003
tblVehicleEF	LDA	5.0300e-004	5.2000e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.23	0.26
tblVehicleEF	LDA	2.0220e-003	2.2970e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.59	0.63
tblVehicleEF	LDA	1.79	1.85
tblVehicleEF	LDA	252.11	258.22
tblVehicleEF	LDA	51.25	52.49
tblVehicleEF	LDA	3.9500e-003	4.2360e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.16	0.17
tblVehicleEF	LDA	1.3730e-003	1.4360e-003
tblVehicleEF	LDA	1.7560e-003	1.8310e-003
tblVehicleEF	LDA	1.2650e-003	1.3240e-003
tblVehicleEF	LDA	1.6140e-003	1.6840e-003
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	7.6170e-003	8.8360e-003
tblVehicleEF	LDA	0.02	0.02

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tblVehicleEF	LDA	0.19	0.20
tblVehicleEF	LDA	2.4440e-003	2.5230e-003
tblVehicleEF	LDA	4.9700e-004	5.1300e-004
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.20	0.22
tblVehicleEF	LDA	1.8490e-003	2.1030e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.54	0.58
tblVehicleEF	LDA	2.37	2.45
tblVehicleEF	LDA	241.44	247.28
tblVehicleEF	LDA	52.33	53.61
tblVehicleEF	LDA	4.3140e-003	4.6290e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.19	0.20
tblVehicleEF	LDA	1.3730e-003	1.4360e-003
tblVehicleEF	LDA	1.7560e-003	1.8310e-003
tblVehicleEF	LDA	1.2650e-003	1.3240e-003
tblVehicleEF	LDA	1.6140e-003	1.6840e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	7.1030e-003	8.2500e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.23	0.25

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tblVehicleEF	LDA	2.3400e-003	2.4160e-003
tblVehicleEF	LDA	5.0700e-004	5.2400e-004
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.25	0.27
tblVehicleEF	LDT1	4.2150e-003	4.7780e-003
tblVehicleEF	LDT1	0.07	0.07
tblVehicleEF	LDT1	0.94	1.03
tblVehicleEF	LDT1	2.37	2.46
tblVehicleEF	LDT1	293.37	299.13
tblVehicleEF	LDT1	63.65	64.92
tblVehicleEF	LDT1	6.5420e-003	7.1830e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.25	0.26
tblVehicleEF	LDT1	1.7680e-003	1.8830e-003
tblVehicleEF	LDT1	2.2640e-003	2.4020e-003
tblVehicleEF	LDT1	1.6280e-003	1.7340e-003
tblVehicleEF	LDT1	2.0810e-003	2.2080e-003
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.32	0.36
tblVehicleEF	LDT1	2.8440e-003	2.9230e-003

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tblVehicleEF	LDT1	6.1700e-004	6.3400e-004
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.36	0.39
tblVehicleEF	LDT1	4.4800e-003	5.0750e-003
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	1.01	1.11
tblVehicleEF	LDT1	1.97	2.04
tblVehicleEF	LDT1	302.82	308.81
tblVehicleEF	LDT1	62.85	64.08
tblVehicleEF	LDT1	5.9940e-003	6.5810e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.22	0.24
tblVehicleEF	LDT1	1.7680e-003	1.8830e-003
tblVehicleEF	LDT1	2.2640e-003	2.4020e-003
tblVehicleEF	LDT1	1.6280e-003	1.7340e-003
tblVehicleEF	LDT1	2.0810e-003	2.2080e-003
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.08	0.08
tblVehicleEF	LDT1	0.28	0.31
tblVehicleEF	LDT1	2.9360e-003	3.0180e-003
tblVehicleEF	LDT1	6.0900e-004	6.2600e-004

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tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.08	0.08
tblVehicleEF	LDT1	0.31	0.34
tblVehicleEF	LDT1	4.1260e-003	4.6790e-003
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.93	1.02
tblVehicleEF	LDT1	2.61	2.71
tblVehicleEF	LDT1	291.74	297.46
tblVehicleEF	LDT1	64.12	65.41
tblVehicleEF	LDT1	6.6350e-003	7.2860e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.26	0.28
tblVehicleEF	LDT1	1.7680e-003	1.8830e-003
tblVehicleEF	LDT1	2.2640e-003	2.4020e-003
tblVehicleEF	LDT1	1.6280e-003	1.7340e-003
tblVehicleEF	LDT1	2.0810e-003	2.2080e-003
tblVehicleEF	LDT1	0.06	0.07
tblVehicleEF	LDT1	0.20	0.22
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.11	0.11
tblVehicleEF	LDT1	0.35	0.38
tblVehicleEF	LDT1	2.8280e-003	2.9070e-003
tblVehicleEF	LDT1	6.2200e-004	6.3900e-004
tblVehicleEF	LDT1	0.06	0.07

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tblVehicleEF	LDT1	0.20	0.22
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.11	0.11
tblVehicleEF	LDT1	0.38	0.42
tblVehicleEF	LDT2	3.7520e-003	4.1960e-003
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.85	0.93
tblVehicleEF	LDT2	2.84	2.93
tblVehicleEF	LDT2	315.70	324.31
tblVehicleEF	LDT2	69.42	71.32
tblVehicleEF	LDT2	6.9230e-003	7.5900e-003
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.30	0.33
tblVehicleEF	LDT2	1.4500e-003	1.5020e-003
tblVehicleEF	LDT2	1.8750e-003	1.9440e-003
tblVehicleEF	LDT2	1.3350e-003	1.3830e-003
tblVehicleEF	LDT2	1.7240e-003	1.7870e-003
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.16	0.16
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.35	0.38
tblVehicleEF	LDT2	3.0600e-003	3.1690e-003
tblVehicleEF	LDT2	6.7300e-004	6.9700e-004
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.16	0.16

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.39	0.42
tblVehicleEF	LDT2	3.9870e-003	4.4550e-003
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.92	0.99
tblVehicleEF	LDT2	2.36	2.43
tblVehicleEF	LDT2	324.76	333.68
tblVehicleEF	LDT2	68.49	70.36
tblVehicleEF	LDT2	6.3830e-003	6.9960e-003
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.28	0.30
tblVehicleEF	LDT2	1.4500e-003	1.5020e-003
tblVehicleEF	LDT2	1.8750e-003	1.9440e-003
tblVehicleEF	LDT2	1.3350e-003	1.3830e-003
tblVehicleEF	LDT2	1.7240e-003	1.7870e-003
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.16	0.17
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.31	0.33
tblVehicleEF	LDT2	3.1480e-003	3.2600e-003
tblVehicleEF	LDT2	6.6400e-004	6.8800e-004
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.16	0.17
tblVehicleEF	LDT2	0.12	0.12

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tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.34	0.37
tblVehicleEF	LDT2	3.6740e-003	4.1100e-003
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.85	0.92
tblVehicleEF	LDT2	3.12	3.23
tblVehicleEF	LDT2	314.16	322.73
tblVehicleEF	LDT2	69.96	71.88
tblVehicleEF	LDT2	7.0010e-003	7.6770e-003
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.08	0.10
tblVehicleEF	LDT2	0.32	0.35
tblVehicleEF	LDT2	1.4500e-003	1.5020e-003
tblVehicleEF	LDT2	1.8750e-003	1.9440e-003
tblVehicleEF	LDT2	1.3350e-003	1.3830e-003
tblVehicleEF	LDT2	1.7240e-003	1.7870e-003
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.17	0.18
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.38	0.41
tblVehicleEF	LDT2	3.0450e-003	3.1530e-003
tblVehicleEF	LDT2	6.7800e-004	7.0200e-004
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.17	0.18
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.02	0.03

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tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.41	0.45
tblVehicleEF	LHD1	4.3940e-003	4.4830e-003
tblVehicleEF	LHD1	8.6160e-003	9.3280e-003
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.91	0.98
tblVehicleEF	LHD1	0.97	1.00
tblVehicleEF	LHD1	9.38	9.45
tblVehicleEF	LHD1	702.79	711.82
tblVehicleEF	LHD1	10.01	10.15
tblVehicleEF	LHD1	9.1000e-004	9.1200e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	1.37	1.50
tblVehicleEF	LHD1	0.28	0.29
tblVehicleEF	LHD1	1.0320e-003	1.0280e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.4500e-004	2.5500e-004
tblVehicleEF	LHD1	9.8800e-004	9.8300e-004
tblVehicleEF	LHD1	2.5240e-003	2.5230e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	2.2500e-004	2.3400e-004
tblVehicleEF	LHD1	1.9440e-003	2.0240e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2020e-003	1.2390e-003

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tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	0.25	0.25
tblVehicleEF	LHD1	0.07	0.08
tblVehicleEF	LHD1	6.8340e-003	6.9220e-003
tblVehicleEF	LHD1	9.9000e-005	1.0000e-004
tblVehicleEF	LHD1	1.9440e-003	2.0240e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.2020e-003	1.2390e-003
tblVehicleEF	LHD1	0.12	0.13
tblVehicleEF	LHD1	0.25	0.25
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	4.4060e-003	4.4950e-003
tblVehicleEF	LHD1	8.7800e-003	9.5160e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.92	1.00
tblVehicleEF	LHD1	0.91	0.94
tblVehicleEF	LHD1	9.38	9.45
tblVehicleEF	LHD1	702.82	711.85
tblVehicleEF	LHD1	9.90	10.04
tblVehicleEF	LHD1	9.1300e-004	9.1500e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	1.32	1.44
tblVehicleEF	LHD1	0.27	0.28
tblVehicleEF	LHD1	1.0320e-003	1.0280e-003
tblVehicleEF	LHD1	0.01	0.01

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tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.4500e-004	2.5500e-004
tblVehicleEF	LHD1	9.8800e-004	9.8300e-004
tblVehicleEF	LHD1	2.5240e-003	2.5230e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	2.2500e-004	2.3400e-004
tblVehicleEF	LHD1	3.1170e-003	3.2550e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9460e-003	2.0180e-003
tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	0.24	0.24
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	6.8340e-003	6.9220e-003
tblVehicleEF	LHD1	9.8000e-005	9.9000e-005
tblVehicleEF	LHD1	3.1170e-003	3.2550e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.9460e-003	2.0180e-003
tblVehicleEF	LHD1	0.12	0.13
tblVehicleEF	LHD1	0.24	0.24
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	4.3870e-003	4.4760e-003
tblVehicleEF	LHD1	8.5210e-003	9.2200e-003
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.90	0.97
tblVehicleEF	LHD1	1.01	1.04
tblVehicleEF	LHD1	9.38	9.45

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tblVehicleEF	LHD1	702.78	711.80
tblVehicleEF	LHD1	10.07	10.22
tblVehicleEF	LHD1	9.0900e-004	9.1200e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	1.36	1.49
tblVehicleEF	LHD1	0.30	0.30
tblVehicleEF	LHD1	1.0320e-003	1.0280e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.4500e-004	2.5500e-004
tblVehicleEF	LHD1	9.8800e-004	9.8300e-004
tblVehicleEF	LHD1	2.5240e-003	2.5230e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	2.2500e-004	2.3400e-004
tblVehicleEF	LHD1	1.3340e-003	1.3850e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	8.8100e-004	9.0500e-004
tblVehicleEF	LHD1	0.10	0.10
tblVehicleEF	LHD1	0.27	0.28
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	6.8340e-003	6.9220e-003
tblVehicleEF	LHD1	1.0000e-004	1.0100e-004
tblVehicleEF	LHD1	1.3340e-003	1.3850e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	8.8100e-004	9.0500e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	0.12	0.13
tblVehicleEF	LHD1	0.27	0.28
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD2	3.0110e-003	3.0890e-003
tblVehicleEF	LHD2	5.9010e-003	6.2600e-003
tblVehicleEF	LHD2	8.5190e-003	9.0470e-003
tblVehicleEF	LHD2	0.13	0.13
tblVehicleEF	LHD2	0.61	0.65
tblVehicleEF	LHD2	0.56	0.59
tblVehicleEF	LHD2	14.59	14.68
tblVehicleEF	LHD2	704.11	714.03
tblVehicleEF	LHD2	7.19	7.35
tblVehicleEF	LHD2	1.8700e-003	1.8760e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	1.33	1.45
tblVehicleEF	LHD2	0.18	0.19
tblVehicleEF	LHD2	1.4680e-003	1.4580e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.1500e-004	1.2000e-004
tblVehicleEF	LHD2	1.4050e-003	1.3940e-003
tblVehicleEF	LHD2	2.7120e-003	2.7090e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	1.1000e-004
tblVehicleEF	LHD2	9.2800e-004	9.7300e-004
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02

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tblVehicleEF	LHD2	6.2200e-004	6.3900e-004
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	1.3900e-004	1.4000e-004
tblVehicleEF	LHD2	6.7870e-003	6.8830e-003
tblVehicleEF	LHD2	7.1000e-005	7.3000e-005
tblVehicleEF	LHD2	9.2800e-004	9.7300e-004
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2200e-004	6.3900e-004
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	3.0200e-003	3.0970e-003
tblVehicleEF	LHD2	5.9520e-003	6.3180e-003
tblVehicleEF	LHD2	8.1300e-003	8.6340e-003
tblVehicleEF	LHD2	0.13	0.13
tblVehicleEF	LHD2	0.62	0.66
tblVehicleEF	LHD2	0.53	0.55
tblVehicleEF	LHD2	14.59	14.68
tblVehicleEF	LHD2	704.12	714.04
tblVehicleEF	LHD2	7.13	7.28
tblVehicleEF	LHD2	1.8710e-003	1.8770e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	1.28	1.39
tblVehicleEF	LHD2	0.17	0.18

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tblVehicleEF	LHD2	1.4680e-003	1.4580e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.1500e-004	1.2000e-004
tblVehicleEF	LHD2	1.4050e-003	1.3940e-003
tblVehicleEF	LHD2	2.7120e-003	2.7090e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	1.1000e-004
tblVehicleEF	LHD2	1.4630e-003	1.5380e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0030e-003	1.0340e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	1.3900e-004	1.4000e-004
tblVehicleEF	LHD2	6.7870e-003	6.8830e-003
tblVehicleEF	LHD2	7.1000e-005	7.2000e-005
tblVehicleEF	LHD2	1.4630e-003	1.5380e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0030e-003	1.0340e-003
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	3.0060e-003	3.0840e-003
tblVehicleEF	LHD2	5.8710e-003	6.2260e-003
tblVehicleEF	LHD2	8.7600e-003	9.3040e-003
tblVehicleEF	LHD2	0.13	0.13

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tblVehicleEF	LHD2	0.61	0.65
tblVehicleEF	LHD2	0.59	0.61
tblVehicleEF	LHD2	14.59	14.68
tblVehicleEF	LHD2	704.11	714.02
tblVehicleEF	LHD2	7.23	7.39
tblVehicleEF	LHD2	1.8690e-003	1.8750e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	1.32	1.44
tblVehicleEF	LHD2	0.19	0.20
tblVehicleEF	LHD2	1.4680e-003	1.4580e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.1500e-004	1.2000e-004
tblVehicleEF	LHD2	1.4050e-003	1.3940e-003
tblVehicleEF	LHD2	2.7120e-003	2.7090e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	1.1000e-004
tblVehicleEF	LHD2	6.4600e-004	6.7400e-004
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.5700e-004	4.6800e-004
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	1.3900e-004	1.4000e-004
tblVehicleEF	LHD2	6.7870e-003	6.8830e-003
tblVehicleEF	LHD2	7.2000e-005	7.3000e-005

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tblVehicleEF	LHD2	6.4600e-004	6.7400e-004
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.5700e-004	4.6800e-004
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	MCY	0.33	0.33
tblVehicleEF	MCY	0.26	0.26
tblVehicleEF	MCY	19.84	20.16
tblVehicleEF	MCY	8.92	8.89
tblVehicleEF	MCY	210.33	210.21
tblVehicleEF	MCY	62.43	62.73
tblVehicleEF	MCY	0.07	0.07
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	1.17	1.18
tblVehicleEF	MCY	0.27	0.27
tblVehicleEF	MCY	1.9280e-003	1.9100e-003
tblVehicleEF	MCY	3.1490e-003	3.3460e-003
tblVehicleEF	MCY	1.8050e-003	1.7900e-003
tblVehicleEF	MCY	2.9700e-003	3.1600e-003
tblVehicleEF	MCY	0.92	0.92
tblVehicleEF	MCY	0.85	0.85
tblVehicleEF	MCY	0.57	0.57
tblVehicleEF	MCY	2.26	2.28
tblVehicleEF	MCY	0.79	0.81
tblVehicleEF	MCY	1.99	2.00
tblVehicleEF	MCY	2.0810e-003	2.0800e-003
tblVehicleEF	MCY	6.1800e-004	6.2100e-004

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tblVehicleEF	MCY	0.92	0.92
tblVehicleEF	MCY	0.85	0.85
tblVehicleEF	MCY	0.57	0.57
tblVehicleEF	MCY	2.78	2.79
tblVehicleEF	MCY	0.79	0.81
tblVehicleEF	MCY	2.17	2.18
tblVehicleEF	MCY	0.32	0.32
tblVehicleEF	MCY	0.22	0.22
tblVehicleEF	MCY	18.46	18.73
tblVehicleEF	MCY	7.86	7.85
tblVehicleEF	MCY	207.82	207.61
tblVehicleEF	MCY	59.77	60.07
tblVehicleEF	MCY	0.06	0.06
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	0.25	0.25
tblVehicleEF	MCY	1.9280e-003	1.9100e-003
tblVehicleEF	MCY	3.1490e-003	3.3460e-003
tblVehicleEF	MCY	1.8050e-003	1.7900e-003
tblVehicleEF	MCY	2.9700e-003	3.1600e-003
tblVehicleEF	MCY	1.62	1.62
tblVehicleEF	MCY	0.90	0.91
tblVehicleEF	MCY	1.10	1.11
tblVehicleEF	MCY	2.17	2.18
tblVehicleEF	MCY	0.73	0.75
tblVehicleEF	MCY	1.69	1.70
tblVehicleEF	MCY	2.0570e-003	2.0550e-003
tblVehicleEF	MCY	5.9100e-004	5.9400e-004
tblVehicleEF	MCY	1.62	1.62

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tblVehicleEF	MCY	0.90	0.91
tblVehicleEF	MCY	1.10	1.11
tblVehicleEF	MCY	2.66	2.67
tblVehicleEF	MCY	0.73	0.75
tblVehicleEF	MCY	1.84	1.85
tblVehicleEF	MCY	0.34	0.34
tblVehicleEF	MCY	0.28	0.28
tblVehicleEF	MCY	20.80	21.15
tblVehicleEF	MCY	9.60	9.57
tblVehicleEF	MCY	212.07	212.00
tblVehicleEF	MCY	64.14	64.44
tblVehicleEF	MCY	0.07	0.07
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	1.18	1.19
tblVehicleEF	MCY	0.28	0.28
tblVehicleEF	MCY	1.9280e-003	1.9100e-003
tblVehicleEF	MCY	3.1490e-003	3.3460e-003
tblVehicleEF	MCY	1.8050e-003	1.7900e-003
tblVehicleEF	MCY	2.9700e-003	3.1600e-003
tblVehicleEF	MCY	0.60	0.60
tblVehicleEF	MCY	1.05	1.07
tblVehicleEF	MCY	0.36	0.36
tblVehicleEF	MCY	2.32	2.34
tblVehicleEF	MCY	0.92	0.94
tblVehicleEF	MCY	2.18	2.19
tblVehicleEF	MCY	2.0990e-003	2.0980e-003
tblVehicleEF	MCY	6.3500e-004	6.3800e-004
tblVehicleEF	MCY	0.60	0.60
tblVehicleEF	MCY	1.05	1.07

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tblVehicleEF	MCY	0.36	0.36
tblVehicleEF	MCY	2.85	2.86
tblVehicleEF	MCY	0.92	0.94
tblVehicleEF	MCY	2.37	2.39
tblVehicleEF	MDV	4.1230e-003	4.6570e-003
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.88	0.96
tblVehicleEF	MDV	3.21	3.40
tblVehicleEF	MDV	388.99	398.83
tblVehicleEF	MDV	84.30	86.53
tblVehicleEF	MDV	8.8130e-003	9.5820e-003
tblVehicleEF	MDV	0.03	0.04
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.35	0.38
tblVehicleEF	MDV	1.4960e-003	1.5600e-003
tblVehicleEF	MDV	1.8690e-003	1.9670e-003
tblVehicleEF	MDV	1.3810e-003	1.4400e-003
tblVehicleEF	MDV	1.7180e-003	1.8090e-003
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.41	0.45
tblVehicleEF	MDV	3.7690e-003	3.8940e-003
tblVehicleEF	MDV	8.1700e-004	8.4600e-004
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.08	0.08

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.45	0.50
tblVehicleEF	MDV	4.3840e-003	4.9430e-003
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.94	1.03
tblVehicleEF	MDV	2.66	2.81
tblVehicleEF	MDV	398.35	408.52
tblVehicleEF	MDV	83.23	85.40
tblVehicleEF	MDV	8.2250e-003	8.9290e-003
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.32	0.35
tblVehicleEF	MDV	1.4960e-003	1.5600e-003
tblVehicleEF	MDV	1.8690e-003	1.9670e-003
tblVehicleEF	MDV	1.3810e-003	1.4400e-003
tblVehicleEF	MDV	1.7180e-003	1.8090e-003
tblVehicleEF	MDV	0.12	0.13
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.13	0.14
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.36	0.40
tblVehicleEF	MDV	3.8590e-003	3.9890e-003
tblVehicleEF	MDV	8.0700e-004	8.3500e-004
tblVehicleEF	MDV	0.12	0.13
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.13	0.14
tblVehicleEF	MDV	0.03	0.03

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tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.40	0.43
tblVehicleEF	MDV	4.0380e-003	4.5660e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.87	0.95
tblVehicleEF	MDV	3.53	3.74
tblVehicleEF	MDV	387.41	397.20
tblVehicleEF	MDV	84.92	87.19
tblVehicleEF	MDV	8.9000e-003	9.6800e-003
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.37	0.40
tblVehicleEF	MDV	1.4960e-003	1.5600e-003
tblVehicleEF	MDV	1.8690e-003	1.9670e-003
tblVehicleEF	MDV	1.3810e-003	1.4400e-003
tblVehicleEF	MDV	1.7180e-003	1.8090e-003
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.17	0.18
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.44	0.49
tblVehicleEF	MDV	3.7530e-003	3.8780e-003
tblVehicleEF	MDV	8.2300e-004	8.5200e-004
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.17	0.18
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.09	0.09

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tblVehicleEF	MDV	0.49	0.53
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.28	1.44
tblVehicleEF	MH	2.05	2.14
tblVehicleEF	MH	1,507.51	1,527.26
tblVehicleEF	MH	18.41	18.86
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.66	1.68
tblVehicleEF	MH	0.25	0.25
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.4300e-004	2.5600e-004
tblVehicleEF	MH	3.2940e-003	3.2880e-003
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.2300e-004	2.3500e-004
tblVehicleEF	MH	0.71	0.75
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.33	0.34
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.8200e-004	1.8700e-004
tblVehicleEF	MH	0.71	0.75
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.33	0.34
tblVehicleEF	MH	0.10	0.11

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tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.32	1.49
tblVehicleEF	MH	1.91	1.99
tblVehicleEF	MH	1,507.57	1,527.34
tblVehicleEF	MH	18.17	18.60
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	1.57	1.60
tblVehicleEF	MH	0.23	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.4300e-004	2.5600e-004
tblVehicleEF	MH	3.2940e-003	3.2880e-003
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.2300e-004	2.3500e-004
tblVehicleEF	MH	1.10	1.17
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.52	0.55
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.09	0.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.8000e-004	1.8400e-004
tblVehicleEF	MH	1.10	1.17
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.52	0.55

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.26	1.42
tblVehicleEF	MH	2.13	2.22
tblVehicleEF	MH	1,507.46	1,527.22
tblVehicleEF	MH	18.55	19.00
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.65	1.68
tblVehicleEF	MH	0.26	0.26
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.4300e-004	2.5600e-004
tblVehicleEF	MH	3.2940e-003	3.2880e-003
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.2300e-004	2.3500e-004
tblVehicleEF	MH	0.51	0.54
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.24	0.25
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.8400e-004	1.8800e-004
tblVehicleEF	MH	0.51	0.54
tblVehicleEF	MH	0.08	0.08

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tblVehicleEF	MH	0.24	0.25
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.11	0.11
tblVehicleEF	MHD	3.2810e-003	3.3490e-003
tblVehicleEF	MHD	2.0190e-003	2.3440e-003
tblVehicleEF	MHD	9.1410e-003	9.7650e-003
tblVehicleEF	MHD	0.36	0.37
tblVehicleEF	MHD	0.26	0.30
tblVehicleEF	MHD	1.08	1.17
tblVehicleEF	MHD	68.31	69.46
tblVehicleEF	MHD	1,019.09	1,034.77
tblVehicleEF	MHD	8.80	9.28
tblVehicleEF	MHD	9.8740e-003	0.01
tblVehicleEF	MHD	0.13	0.14
tblVehicleEF	MHD	6.6810e-003	6.8530e-003
tblVehicleEF	MHD	0.40	0.42
tblVehicleEF	MHD	1.44	1.45
tblVehicleEF	MHD	1.70	1.68
tblVehicleEF	MHD	3.8000e-004	4.3900e-004
tblVehicleEF	MHD	8.9210e-003	8.9900e-003
tblVehicleEF	MHD	1.0400e-004	1.1100e-004
tblVehicleEF	MHD	3.6300e-004	4.2000e-004
tblVehicleEF	MHD	8.5300e-003	8.5960e-003
tblVehicleEF	MHD	9.6000e-005	1.0200e-004
tblVehicleEF	MHD	3.7300e-004	4.1100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.4700e-004	2.6700e-004

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tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	6.4800e-004	6.5900e-004
tblVehicleEF	MHD	9.7110e-003	9.8620e-003
tblVehicleEF	MHD	8.7000e-005	9.2000e-005
tblVehicleEF	MHD	3.7300e-004	4.1100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.4700e-004	2.6700e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.06
tblVehicleEF	MHD	3.0880e-003	3.1480e-003
tblVehicleEF	MHD	2.0630e-003	2.3970e-003
tblVehicleEF	MHD	8.7090e-003	9.3010e-003
tblVehicleEF	MHD	0.30	0.30
tblVehicleEF	MHD	0.26	0.30
tblVehicleEF	MHD	1.01	1.10
tblVehicleEF	MHD	68.45	69.70
tblVehicleEF	MHD	1,019.09	1,034.78
tblVehicleEF	MHD	8.68	9.15
tblVehicleEF	MHD	9.8530e-003	0.01
tblVehicleEF	MHD	0.13	0.14
tblVehicleEF	MHD	6.4510e-003	6.6180e-003
tblVehicleEF	MHD	0.40	0.42
tblVehicleEF	MHD	1.38	1.39
tblVehicleEF	MHD	1.70	1.68
tblVehicleEF	MHD	3.2300e-004	3.7300e-004

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tblVehicleEF	MHD	8.9210e-003	8.9900e-003
tblVehicleEF	MHD	1.0400e-004	1.1100e-004
tblVehicleEF	MHD	3.0900e-004	3.5700e-004
tblVehicleEF	MHD	8.5300e-003	8.5960e-003
tblVehicleEF	MHD	9.6000e-005	1.0200e-004
tblVehicleEF	MHD	5.9900e-004	6.6300e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.0600e-004	4.4100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	6.4900e-004	6.6100e-004
tblVehicleEF	MHD	9.7120e-003	9.8620e-003
tblVehicleEF	MHD	8.6000e-005	9.1000e-005
tblVehicleEF	MHD	5.9900e-004	6.6300e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.0600e-004	4.4100e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.06
tblVehicleEF	MHD	3.4680e-003	3.5400e-003
tblVehicleEF	MHD	1.9930e-003	2.3130e-003
tblVehicleEF	MHD	9.4030e-003	0.01
tblVehicleEF	MHD	0.42	0.43
tblVehicleEF	MHD	0.25	0.29
tblVehicleEF	MHD	1.13	1.23
tblVehicleEF	MHD	68.25	69.27

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tblVehicleEF	MHD	1,019.08	1,034.76
tblVehicleEF	MHD	8.88	9.37
tblVehicleEF	MHD	9.9080e-003	0.01
tblVehicleEF	MHD	0.13	0.14
tblVehicleEF	MHD	6.8910e-003	7.0690e-003
tblVehicleEF	MHD	0.41	0.43
tblVehicleEF	MHD	1.42	1.44
tblVehicleEF	MHD	1.70	1.69
tblVehicleEF	MHD	4.5800e-004	5.3000e-004
tblVehicleEF	MHD	8.9210e-003	8.9900e-003
tblVehicleEF	MHD	1.0400e-004	1.1100e-004
tblVehicleEF	MHD	4.3800e-004	5.0700e-004
tblVehicleEF	MHD	8.5300e-003	8.5960e-003
tblVehicleEF	MHD	9.6000e-005	1.0200e-004
tblVehicleEF	MHD	2.5600e-004	2.8100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.8000e-004	1.9300e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	6.4700e-004	6.5700e-004
tblVehicleEF	MHD	9.7110e-003	9.8620e-003
tblVehicleEF	MHD	8.8000e-005	9.3000e-005
tblVehicleEF	MHD	2.5600e-004	2.8100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.8000e-004	1.9300e-004
tblVehicleEF	MHD	0.02	0.03

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tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	OBUS	7.9900e-003	8.0370e-003
tblVehicleEF	OBUS	7.5690e-003	8.7220e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.50	0.49
tblVehicleEF	OBUS	0.89	1.03
tblVehicleEF	OBUS	2.72	2.81
tblVehicleEF	OBUS	70.02	68.39
tblVehicleEF	OBUS	1,394.70	1,421.03
tblVehicleEF	OBUS	20.09	20.60
tblVehicleEF	OBUS	8.9990e-003	8.6950e-003
tblVehicleEF	OBUS	0.11	0.11
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.26	0.25
tblVehicleEF	OBUS	1.26	1.25
tblVehicleEF	OBUS	0.82	0.80
tblVehicleEF	OBUS	8.5000e-005	8.1000e-005
tblVehicleEF	OBUS	6.9550e-003	6.6020e-003
tblVehicleEF	OBUS	2.0400e-004	2.0900e-004
tblVehicleEF	OBUS	8.1000e-005	7.8000e-005
tblVehicleEF	OBUS	6.6370e-003	6.2990e-003
tblVehicleEF	OBUS	1.8800e-004	1.9200e-004
tblVehicleEF	OBUS	1.6770e-003	1.7310e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	9.0800e-004	9.2500e-004
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.09	0.09

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tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	6.6800e-004	6.5300e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.9900e-004	2.0400e-004
tblVehicleEF	OBUS	1.6770e-003	1.7310e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	9.0800e-004	9.2500e-004
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.14	0.14
tblVehicleEF	OBUS	8.0580e-003	8.1030e-003
tblVehicleEF	OBUS	7.7810e-003	8.9710e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.50	0.49
tblVehicleEF	OBUS	0.92	1.05
tblVehicleEF	OBUS	2.53	2.62
tblVehicleEF	OBUS	69.26	67.66
tblVehicleEF	OBUS	1,394.74	1,421.08
tblVehicleEF	OBUS	19.77	20.27
tblVehicleEF	OBUS	8.8840e-003	8.5840e-003
tblVehicleEF	OBUS	0.11	0.11
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.25	0.24
tblVehicleEF	OBUS	1.20	1.18
tblVehicleEF	OBUS	0.80	0.78
tblVehicleEF	OBUS	7.5000e-005	7.2000e-005
tblVehicleEF	OBUS	6.9550e-003	6.6020e-003
tblVehicleEF	OBUS	2.0400e-004	2.0900e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	7.2000e-005	6.9000e-005
tblVehicleEF	OBUS	6.6370e-003	6.2990e-003
tblVehicleEF	OBUS	1.8800e-004	1.9200e-004
tblVehicleEF	OBUS	2.6160e-003	2.7120e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	1.4530e-003	1.4870e-003
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	6.6100e-004	6.4600e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.9600e-004	2.0100e-004
tblVehicleEF	OBUS	2.6160e-003	2.7120e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	1.4530e-003	1.4870e-003
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.13	0.14
tblVehicleEF	OBUS	7.9130e-003	7.9630e-003
tblVehicleEF	OBUS	7.4480e-003	8.5800e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.50	0.49
tblVehicleEF	OBUS	0.88	1.01
tblVehicleEF	OBUS	2.82	2.92
tblVehicleEF	OBUS	71.07	69.41
tblVehicleEF	OBUS	1,394.67	1,421.00
tblVehicleEF	OBUS	20.27	20.78

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tblVehicleEF	OBUS	9.1630e-003	8.8530e-003
tblVehicleEF	OBUS	0.11	0.11
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.28	0.27
tblVehicleEF	OBUS	1.25	1.24
tblVehicleEF	OBUS	0.83	0.81
tblVehicleEF	OBUS	9.8000e-005	9.4000e-005
tblVehicleEF	OBUS	6.9550e-003	6.6020e-003
tblVehicleEF	OBUS	2.0400e-004	2.0900e-004
tblVehicleEF	OBUS	9.4000e-005	9.0000e-005
tblVehicleEF	OBUS	6.6370e-003	6.2990e-003
tblVehicleEF	OBUS	1.8800e-004	1.9200e-004
tblVehicleEF	OBUS	1.2110e-003	1.2440e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	6.7500e-004	6.8600e-004
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	6.7800e-004	6.6200e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	2.0100e-004	2.0600e-004
tblVehicleEF	OBUS	1.2110e-003	1.2440e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	6.7500e-004	6.8600e-004
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.14	0.15

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tblVehicleEF	SBUS	0.06	0.06
tblVehicleEF	SBUS	8.7580e-003	9.6490e-003
tblVehicleEF	SBUS	6.3970e-003	6.4810e-003
tblVehicleEF	SBUS	2.28	2.26
tblVehicleEF	SBUS	0.79	0.87
tblVehicleEF	SBUS	0.89	0.93
tblVehicleEF	SBUS	358.06	359.37
tblVehicleEF	SBUS	1,074.49	1,081.95
tblVehicleEF	SBUS	4.74	4.81
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	5.1790e-003	5.0570e-003
tblVehicleEF	SBUS	3.89	3.96
tblVehicleEF	SBUS	4.78	4.94
tblVehicleEF	SBUS	0.65	0.61
tblVehicleEF	SBUS	3.9690e-003	4.2250e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.2000e-005	3.3000e-005
tblVehicleEF	SBUS	3.7970e-003	4.0430e-003
tblVehicleEF	SBUS	2.6630e-003	2.6610e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	2.9000e-005	3.0000e-005
tblVehicleEF	SBUS	1.0280e-003	1.0980e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.26	0.26
tblVehicleEF	SBUS	5.4200e-004	5.5100e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.02

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tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4100e-003	3.4220e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.7000e-005	4.8000e-005
tblVehicleEF	SBUS	1.0280e-003	1.0980e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.38	0.37
tblVehicleEF	SBUS	5.4200e-004	5.5100e-004
tblVehicleEF	SBUS	0.12	0.13
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.06	0.06
tblVehicleEF	SBUS	8.9030e-003	9.8160e-003
tblVehicleEF	SBUS	5.6780e-003	5.7510e-003
tblVehicleEF	SBUS	2.24	2.22
tblVehicleEF	SBUS	0.80	0.89
tblVehicleEF	SBUS	0.72	0.75
tblVehicleEF	SBUS	369.44	371.14
tblVehicleEF	SBUS	1,074.52	1,081.98
tblVehicleEF	SBUS	4.45	4.51
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	5.0060e-003	4.8880e-003
tblVehicleEF	SBUS	4.00	4.07
tblVehicleEF	SBUS	4.59	4.74
tblVehicleEF	SBUS	0.65	0.61
tblVehicleEF	SBUS	3.3520e-003	3.5680e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03

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tblVehicleEF	SBUS	3.2000e-005	3.3000e-005
tblVehicleEF	SBUS	3.2070e-003	3.4140e-003
tblVehicleEF	SBUS	2.6630e-003	2.6610e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	2.9000e-005	3.0000e-005
tblVehicleEF	SBUS	1.5850e-003	1.7070e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.26	0.26
tblVehicleEF	SBUS	8.2800e-004	8.5000e-004
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.5180e-003	3.5340e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.4000e-005	4.5000e-005
tblVehicleEF	SBUS	1.5850e-003	1.7070e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.38	0.37
tblVehicleEF	SBUS	8.2800e-004	8.5000e-004
tblVehicleEF	SBUS	0.12	0.13
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.06	0.06
tblVehicleEF	SBUS	8.6810e-003	9.5600e-003
tblVehicleEF	SBUS	6.7490e-003	6.8370e-003
tblVehicleEF	SBUS	2.34	2.31
tblVehicleEF	SBUS	0.78	0.86
tblVehicleEF	SBUS	0.98	1.02
tblVehicleEF	SBUS	342.35	343.13

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tblVehicleEF	SBUS	1,074.48	1,081.93
tblVehicleEF	SBUS	4.88	4.95
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	5.3330e-003	5.2070e-003
tblVehicleEF	SBUS	3.75	3.81
tblVehicleEF	SBUS	4.73	4.89
tblVehicleEF	SBUS	0.66	0.62
tblVehicleEF	SBUS	4.8210e-003	5.1330e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.2000e-005	3.3000e-005
tblVehicleEF	SBUS	4.6120e-003	4.9110e-003
tblVehicleEF	SBUS	2.6630e-003	2.6610e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	2.9000e-005	3.0000e-005
tblVehicleEF	SBUS	7.5500e-004	8.0400e-004
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.26	0.26
tblVehicleEF	SBUS	4.1300e-004	4.1900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.2620e-003	3.2690e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.8000e-005	4.9000e-005
tblVehicleEF	SBUS	7.5500e-004	8.0400e-004
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.38	0.38

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tblVehicleEF	SBUS	4.1300e-004	4.1900e-004
tblVehicleEF	SBUS	0.12	0.13
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	UBUS	1.69	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	12.85	12.68
tblVehicleEF	UBUS	1.35	1.35
tblVehicleEF	UBUS	1,572.92	1,581.14
tblVehicleEF	UBUS	15.19	15.29
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.50	0.57
tblVehicleEF	UBUS	0.15	0.15
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5100e-003	4.4900e-003
tblVehicleEF	UBUS	1.4900e-004	1.4500e-004
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	6.2400e-003	6.2410e-003
tblVehicleEF	UBUS	4.3010e-003	4.2820e-003
tblVehicleEF	UBUS	1.3700e-004	1.3300e-004
tblVehicleEF	UBUS	6.8000e-004	6.2100e-004
tblVehicleEF	UBUS	9.7270e-003	8.5820e-003
tblVehicleEF	UBUS	5.3300e-004	4.7800e-004
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	2.4830e-003	2.1230e-003
tblVehicleEF	UBUS	0.08	0.07
tblVehicleEF	UBUS	9.5600e-003	9.7130e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	1.5000e-004	1.5100e-004
tblVehicleEF	UBUS	6.8000e-004	6.2100e-004
tblVehicleEF	UBUS	9.7270e-003	8.5820e-003
tblVehicleEF	UBUS	5.3300e-004	4.7800e-004
tblVehicleEF	UBUS	1.74	1.71
tblVehicleEF	UBUS	2.4830e-003	2.1230e-003
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	1.69	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	12.85	12.68
tblVehicleEF	UBUS	1.15	1.16
tblVehicleEF	UBUS	1,572.93	1,581.15
tblVehicleEF	UBUS	14.86	14.96
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.50	0.56
tblVehicleEF	UBUS	0.14	0.14
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5100e-003	4.4900e-003
tblVehicleEF	UBUS	1.4900e-004	1.4500e-004
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	6.2400e-003	6.2410e-003
tblVehicleEF	UBUS	4.3010e-003	4.2820e-003
tblVehicleEF	UBUS	1.3700e-004	1.3300e-004
tblVehicleEF	UBUS	1.0570e-003	9.7200e-004
tblVehicleEF	UBUS	0.01	8.9120e-003
tblVehicleEF	UBUS	8.9500e-004	8.0700e-004
tblVehicleEF	UBUS	0.03	0.03

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tblVehicleEF	UBUS	2.2050e-003	1.8900e-003
tblVehicleEF	UBUS	0.07	0.07
tblVehicleEF	UBUS	9.5600e-003	9.7130e-003
tblVehicleEF	UBUS	1.4700e-004	1.4800e-004
tblVehicleEF	UBUS	1.0570e-003	9.7200e-004
tblVehicleEF	UBUS	0.01	8.9120e-003
tblVehicleEF	UBUS	8.9500e-004	8.0700e-004
tblVehicleEF	UBUS	1.74	1.71
tblVehicleEF	UBUS	2.2050e-003	1.8900e-003
tblVehicleEF	UBUS	0.08	0.07
tblVehicleEF	UBUS	1.69	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	12.85	12.68
tblVehicleEF	UBUS	1.46	1.47
tblVehicleEF	UBUS	1,572.92	1,581.14
tblVehicleEF	UBUS	15.39	15.49
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.50	0.57
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5100e-003	4.4900e-003
tblVehicleEF	UBUS	1.4900e-004	1.4500e-004
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	6.2400e-003	6.2410e-003
tblVehicleEF	UBUS	4.3010e-003	4.2820e-003
tblVehicleEF	UBUS	1.3700e-004	1.3300e-004
tblVehicleEF	UBUS	4.9100e-004	4.4600e-004

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	0.01	9.1860e-003
tblVehicleEF	UBUS	3.8400e-004	3.4300e-004
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	3.0840e-003	2.6240e-003
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	9.5600e-003	9.7130e-003
tblVehicleEF	UBUS	1.5200e-004	1.5300e-004
tblVehicleEF	UBUS	4.9100e-004	4.4600e-004
tblVehicleEF	UBUS	0.01	9.1860e-003
tblVehicleEF	UBUS	3.8400e-004	3.4300e-004
tblVehicleEF	UBUS	1.74	1.71
tblVehicleEF	UBUS	3.0840e-003	2.6240e-003
tblVehicleEF	UBUS	0.09	0.09

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	3.1000e-004	3.5400e-003	2.7800e-003	1.0000e-005	3.1000e-004	1.3000e-004	4.3000e-004	4.0000e-005	1.2000e-004	1.6000e-004	0.0000	0.5496	0.5496	1.7000e-004	0.0000	0.5541
Maximum	**3.1000e-004**	**3.5400e-003**	**2.7800e-003**	**1.0000e-005**	**3.1000e-004**	**1.3000e-004**	**4.3000e-004**	**4.0000e-005**	**1.2000e-004**	**1.6000e-004**	**0.0000**	**0.5496**	**0.5496**	**1.7000e-004**	**0.0000**	**0.5541**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	3.1000e-004	3.5400e-003	2.7800e-003	1.0000e-005	1.6000e-004	1.3000e-004	2.9000e-004	2.0000e-005	1.2000e-004	1.4000e-004	0.0000	0.5496	0.5496	1.7000e-004	0.0000	0.5541
Maximum	**3.1000e-004**	**3.5400e-003**	**2.7800e-003**	**1.0000e-005**	**1.6000e-004**	**1.3000e-004**	**2.9000e-004**	**2.0000e-005**	**1.2000e-004**	**1.4000e-004**	**0.0000**	**0.5496**	**0.5496**	**1.7000e-004**	**0.0000**	**0.5541**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**48.39**	**0.00**	**32.56**	**50.00**	**0.00**	**12.50**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-4-2023	9-30-2023	0.0028	0.0028
		Highest	0.0028	0.0028

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.0000e-005	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.0000e-005	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/4/2023	9/4/2023	5	1	

Acres of Grading (Site Preparation Phase): 0.5

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.01

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Skid Steer Loaders	1	8.00	65	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0000e-004	3.5300e-003	2.6500e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.2000e-004	1.2000e-004	0.0000	0.5184	0.5184	1.7000e-004	0.0000	0.5226
Total	**3.0000e-004**	**3.5300e-003**	**2.6500e-003**	**1.0000e-005**	**2.7000e-004**	**1.3000e-004**	**4.0000e-004**	**3.0000e-005**	**1.2000e-004**	**1.5000e-004**	**0.0000**	**0.5184**	**0.5184**	**1.7000e-004**	**0.0000**	**0.5226**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.2000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0312	0.0312	0.0000	0.0000	0.0315
Total	**1.0000e-005**	**1.0000e-005**	**1.2000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0312**	**0.0312**	**0.0000**	**0.0000**	**0.0315**

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3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2000e-004	0.0000	1.2000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0000e-004	3.5300e-003	2.6500e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.2000e-004	1.2000e-004	0.0000	0.5184	0.5184	1.7000e-004	0.0000	0.5226
Total	**3.0000e-004**	**3.5300e-003**	**2.6500e-003**	**1.0000e-005**	**1.2000e-004**	**1.3000e-004**	**2.5000e-004**	**1.0000e-005**	**1.2000e-004**	**1.3000e-004**	**0.0000**	**0.5184**	**0.5184**	**1.7000e-004**	**0.0000**	**0.5226**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.2000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0312	0.0312	0.0000	0.0000	0.0315
Total	**1.0000e-005**	**1.0000e-005**	**1.2000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0312**	**0.0312**	**0.0000**	**0.0000**	**0.0315**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.513608	0.056184	0.190534	0.143608	0.031407	0.007983	0.010518	0.006055	0.000837	0.000446	0.030807	0.001563	0.006450

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.0000e-005	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Unmitigated	4.0000e-005	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Temporary Pump Station A

South Central Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	0.42	1000sqft	0.01	418.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on the dimensions of the temporary booster pump station. (22 feet by 19 feet = 418 square feet ground distrubance)

Construction Phase - Adjusted construction schedule to meet applicant provided schedule. Assume no paving and architectural coating for temporary pump station.

Trips and VMT - Worker trips provided by the applicant.

Grading -

Off-road Equipment - Equipment list provided by the applicant.

Construction Off-road Equipment Mitigation - Per VCAPCD Rule 55.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	6.1320e-003	6.0550e-003
tblFleetMix	LDA	0.52	0.51

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT2	0.19	0.19
tblFleetMix	LHD1	0.03	0.03
tblFleetMix	LHD2	7.8410e-003	7.9830e-003
tblFleetMix	MCY	0.03	0.03
tblFleetMix	MDV	0.14	0.14
tblFleetMix	MH	6.1180e-003	6.4500e-003
tblFleetMix	MHD	0.01	0.01
tblFleetMix	OBUS	8.2400e-004	8.3700e-004
tblFleetMix	SBUS	1.5440e-003	1.5630e-003
tblFleetMix	UBUS	4.4200e-004	4.4600e-004
tblLandUse	LandUseSquareFeet	420.00	418.00
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblTripsAndVMT	WorkerTripNumber	8.00	10.00
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	6.17	6.14
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	6.4060e-003	6.1290e-003
tblVehicleEF	HHD	1,034.77	1,047.01
tblVehicleEF	HHD	1,402.11	1,426.18
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.16	0.17
tblVehicleEF	HHD	0.22	0.23
tblVehicleEF	HHD	2.6000e-005	3.2000e-005
tblVehicleEF	HHD	5.48	5.52
tblVehicleEF	HHD	2.85	2.92
tblVehicleEF	HHD	2.49	2.48
tblVehicleEF	HHD	3.3150e-003	3.4930e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	2.0000e-006
tblVehicleEF	HHD	3.1710e-003	3.3420e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7930e-003	8.7900e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	3.0000e-006	4.0000e-006
tblVehicleEF	HHD	1.9700e-004	2.5200e-004
tblVehicleEF	HHD	0.42	0.42
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.4000e-005	1.2600e-004
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	9.5520e-003	9.6730e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	3.0000e-006	4.0000e-006
tblVehicleEF	HHD	1.9700e-004	2.5200e-004
tblVehicleEF	HHD	0.48	0.48
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	0.12	0.12
tblVehicleEF	HHD	8.4000e-005	1.2600e-004
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	6.08	6.05
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	5.9790e-003	5.7210e-003
tblVehicleEF	HHD	1,024.20	1,036.61

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	1,402.11	1,426.18
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.16	0.16
tblVehicleEF	HHD	0.22	0.23
tblVehicleEF	HHD	2.5000e-005	3.1000e-005
tblVehicleEF	HHD	5.26	5.30
tblVehicleEF	HHD	2.74	2.81
tblVehicleEF	HHD	2.49	2.48
tblVehicleEF	HHD	2.8760e-003	3.0250e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	2.0000e-006
tblVehicleEF	HHD	2.7510e-003	2.8940e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7930e-003	8.7900e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	6.0000e-006	7.0000e-006
tblVehicleEF	HHD	1.9800e-004	2.5200e-004
tblVehicleEF	HHD	0.44	0.44
tblVehicleEF	HHD	4.0000e-006	5.0000e-006
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.2000e-005	1.2200e-004
tblVehicleEF	HHD	9.4530e-003	9.5760e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.0000e-006	7.0000e-006
tblVehicleEF	HHD	1.9800e-004	2.5200e-004
tblVehicleEF	HHD	0.51	0.51
tblVehicleEF	HHD	4.0000e-006	5.0000e-006

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.12	0.12
tblVehicleEF	HHD	8.2000e-005	1.2200e-004
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	0.00	1.0000e-006
tblVehicleEF	HHD	6.30	6.27
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	6.6800e-003	6.3920e-003
tblVehicleEF	HHD	1,049.38	1,061.39
tblVehicleEF	HHD	1,402.11	1,426.18
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.17	0.17
tblVehicleEF	HHD	0.22	0.23
tblVehicleEF	HHD	2.7000e-005	3.3000e-005
tblVehicleEF	HHD	5.79	5.83
tblVehicleEF	HHD	2.82	2.89
tblVehicleEF	HHD	2.49	2.48
tblVehicleEF	HHD	3.9220e-003	4.1380e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	2.0000e-006
tblVehicleEF	HHD	3.7520e-003	3.9590e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7930e-003	8.7900e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	2.1900e-004	2.8300e-004

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.38	0.38
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	9.1000e-005	1.3500e-004
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	9.6880e-003	9.8080e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	2.1900e-004	2.8300e-004
tblVehicleEF	HHD	0.44	0.44
tblVehicleEF	HHD	0.12	0.12
tblVehicleEF	HHD	9.1000e-005	1.3500e-004
tblVehicleEF	LDA	1.8920e-003	2.1510e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.54	0.58
tblVehicleEF	LDA	2.15	2.23
tblVehicleEF	LDA	243.01	248.89
tblVehicleEF	LDA	51.93	53.20
tblVehicleEF	LDA	4.2670e-003	4.5780e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.18	0.19
tblVehicleEF	LDA	1.3730e-003	1.4360e-003
tblVehicleEF	LDA	1.7560e-003	1.8310e-003
tblVehicleEF	LDA	1.2650e-003	1.3240e-003
tblVehicleEF	LDA	1.6140e-003	1.6840e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	7.2190e-003	8.3800e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.21	0.23
tblVehicleEF	LDA	2.3550e-003	2.4310e-003
tblVehicleEF	LDA	5.0300e-004	5.2000e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.23	0.26
tblVehicleEF	LDA	2.0220e-003	2.2970e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.59	0.63
tblVehicleEF	LDA	1.79	1.85
tblVehicleEF	LDA	252.11	258.22
tblVehicleEF	LDA	51.25	52.49
tblVehicleEF	LDA	3.9500e-003	4.2360e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.16	0.17
tblVehicleEF	LDA	1.3730e-003	1.4360e-003
tblVehicleEF	LDA	1.7560e-003	1.8310e-003
tblVehicleEF	LDA	1.2650e-003	1.3240e-003
tblVehicleEF	LDA	1.6140e-003	1.6840e-003
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	7.6170e-003	8.8360e-003
tblVehicleEF	LDA	0.02	0.02

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	0.19	0.20
tblVehicleEF	LDA	2.4440e-003	2.5230e-003
tblVehicleEF	LDA	4.9700e-004	5.1300e-004
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.20	0.22
tblVehicleEF	LDA	1.8490e-003	2.1030e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.54	0.58
tblVehicleEF	LDA	2.37	2.45
tblVehicleEF	LDA	241.44	247.28
tblVehicleEF	LDA	52.33	53.61
tblVehicleEF	LDA	4.3140e-003	4.6290e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.19	0.20
tblVehicleEF	LDA	1.3730e-003	1.4360e-003
tblVehicleEF	LDA	1.7560e-003	1.8310e-003
tblVehicleEF	LDA	1.2650e-003	1.3240e-003
tblVehicleEF	LDA	1.6140e-003	1.6840e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	7.1030e-003	8.2500e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.23	0.25

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	2.3400e-003	2.4160e-003
tblVehicleEF	LDA	5.0700e-004	5.2400e-004
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.25	0.27
tblVehicleEF	LDT1	4.2150e-003	4.7780e-003
tblVehicleEF	LDT1	0.07	0.07
tblVehicleEF	LDT1	0.94	1.03
tblVehicleEF	LDT1	2.37	2.46
tblVehicleEF	LDT1	293.37	299.13
tblVehicleEF	LDT1	63.65	64.92
tblVehicleEF	LDT1	6.5420e-003	7.1830e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.25	0.26
tblVehicleEF	LDT1	1.7680e-003	1.8830e-003
tblVehicleEF	LDT1	2.2640e-003	2.4020e-003
tblVehicleEF	LDT1	1.6280e-003	1.7340e-003
tblVehicleEF	LDT1	2.0810e-003	2.2080e-003
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.32	0.36
tblVehicleEF	LDT1	2.8440e-003	2.9230e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	6.1700e-004	6.3400e-004
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.36	0.39
tblVehicleEF	LDT1	4.4800e-003	5.0750e-003
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	1.01	1.11
tblVehicleEF	LDT1	1.97	2.04
tblVehicleEF	LDT1	302.82	308.81
tblVehicleEF	LDT1	62.85	64.08
tblVehicleEF	LDT1	5.9940e-003	6.5810e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.22	0.24
tblVehicleEF	LDT1	1.7680e-003	1.8830e-003
tblVehicleEF	LDT1	2.2640e-003	2.4020e-003
tblVehicleEF	LDT1	1.6280e-003	1.7340e-003
tblVehicleEF	LDT1	2.0810e-003	2.2080e-003
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.08	0.08
tblVehicleEF	LDT1	0.28	0.31
tblVehicleEF	LDT1	2.9360e-003	3.0180e-003
tblVehicleEF	LDT1	6.0900e-004	6.2600e-004

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.08	0.08
tblVehicleEF	LDT1	0.31	0.34
tblVehicleEF	LDT1	4.1260e-003	4.6790e-003
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.93	1.02
tblVehicleEF	LDT1	2.61	2.71
tblVehicleEF	LDT1	291.74	297.46
tblVehicleEF	LDT1	64.12	65.41
tblVehicleEF	LDT1	6.6350e-003	7.2860e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.26	0.28
tblVehicleEF	LDT1	1.7680e-003	1.8830e-003
tblVehicleEF	LDT1	2.2640e-003	2.4020e-003
tblVehicleEF	LDT1	1.6280e-003	1.7340e-003
tblVehicleEF	LDT1	2.0810e-003	2.2080e-003
tblVehicleEF	LDT1	0.06	0.07
tblVehicleEF	LDT1	0.20	0.22
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.11	0.11
tblVehicleEF	LDT1	0.35	0.38
tblVehicleEF	LDT1	2.8280e-003	2.9070e-003
tblVehicleEF	LDT1	6.2200e-004	6.3900e-004
tblVehicleEF	LDT1	0.06	0.07

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	0.20	0.22
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.11	0.11
tblVehicleEF	LDT1	0.38	0.42
tblVehicleEF	LDT2	3.7520e-003	4.1960e-003
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.85	0.93
tblVehicleEF	LDT2	2.84	2.93
tblVehicleEF	LDT2	315.70	324.31
tblVehicleEF	LDT2	69.42	71.32
tblVehicleEF	LDT2	6.9230e-003	7.5900e-003
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.30	0.33
tblVehicleEF	LDT2	1.4500e-003	1.5020e-003
tblVehicleEF	LDT2	1.8750e-003	1.9440e-003
tblVehicleEF	LDT2	1.3350e-003	1.3830e-003
tblVehicleEF	LDT2	1.7240e-003	1.7870e-003
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.16	0.16
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.35	0.38
tblVehicleEF	LDT2	3.0600e-003	3.1690e-003
tblVehicleEF	LDT2	6.7300e-004	6.9700e-004
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.16	0.16

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.39	0.42
tblVehicleEF	LDT2	3.9870e-003	4.4550e-003
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.92	0.99
tblVehicleEF	LDT2	2.36	2.43
tblVehicleEF	LDT2	324.76	333.68
tblVehicleEF	LDT2	68.49	70.36
tblVehicleEF	LDT2	6.3830e-003	6.9960e-003
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.28	0.30
tblVehicleEF	LDT2	1.4500e-003	1.5020e-003
tblVehicleEF	LDT2	1.8750e-003	1.9440e-003
tblVehicleEF	LDT2	1.3350e-003	1.3830e-003
tblVehicleEF	LDT2	1.7240e-003	1.7870e-003
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.16	0.17
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.31	0.33
tblVehicleEF	LDT2	3.1480e-003	3.2600e-003
tblVehicleEF	LDT2	6.6400e-004	6.8800e-004
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.16	0.17
tblVehicleEF	LDT2	0.12	0.12

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.34	0.37
tblVehicleEF	LDT2	3.6740e-003	4.1100e-003
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.85	0.92
tblVehicleEF	LDT2	3.12	3.23
tblVehicleEF	LDT2	314.16	322.73
tblVehicleEF	LDT2	69.96	71.88
tblVehicleEF	LDT2	7.0010e-003	7.6770e-003
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.08	0.10
tblVehicleEF	LDT2	0.32	0.35
tblVehicleEF	LDT2	1.4500e-003	1.5020e-003
tblVehicleEF	LDT2	1.8750e-003	1.9440e-003
tblVehicleEF	LDT2	1.3350e-003	1.3830e-003
tblVehicleEF	LDT2	1.7240e-003	1.7870e-003
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.17	0.18
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.38	0.41
tblVehicleEF	LDT2	3.0450e-003	3.1530e-003
tblVehicleEF	LDT2	6.7800e-004	7.0200e-004
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.17	0.18
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.02	0.03

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.41	0.45
tblVehicleEF	LHD1	4.3940e-003	4.4830e-003
tblVehicleEF	LHD1	8.6160e-003	9.3280e-003
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.91	0.98
tblVehicleEF	LHD1	0.97	1.00
tblVehicleEF	LHD1	9.38	9.45
tblVehicleEF	LHD1	702.79	711.82
tblVehicleEF	LHD1	10.01	10.15
tblVehicleEF	LHD1	9.1000e-004	9.1200e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	1.37	1.50
tblVehicleEF	LHD1	0.28	0.29
tblVehicleEF	LHD1	1.0320e-003	1.0280e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.4500e-004	2.5500e-004
tblVehicleEF	LHD1	9.8800e-004	9.8300e-004
tblVehicleEF	LHD1	2.5240e-003	2.5230e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	2.2500e-004	2.3400e-004
tblVehicleEF	LHD1	1.9440e-003	2.0240e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2020e-003	1.2390e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	0.25	0.25
tblVehicleEF	LHD1	0.07	0.08
tblVehicleEF	LHD1	6.8340e-003	6.9220e-003
tblVehicleEF	LHD1	9.9000e-005	1.0000e-004
tblVehicleEF	LHD1	1.9440e-003	2.0240e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.2020e-003	1.2390e-003
tblVehicleEF	LHD1	0.12	0.13
tblVehicleEF	LHD1	0.25	0.25
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	4.4060e-003	4.4950e-003
tblVehicleEF	LHD1	8.7800e-003	9.5160e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.92	1.00
tblVehicleEF	LHD1	0.91	0.94
tblVehicleEF	LHD1	9.38	9.45
tblVehicleEF	LHD1	702.82	711.85
tblVehicleEF	LHD1	9.90	10.04
tblVehicleEF	LHD1	9.1300e-004	9.1500e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	1.32	1.44
tblVehicleEF	LHD1	0.27	0.28
tblVehicleEF	LHD1	1.0320e-003	1.0280e-003
tblVehicleEF	LHD1	0.01	0.01

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.4500e-004	2.5500e-004
tblVehicleEF	LHD1	9.8800e-004	9.8300e-004
tblVehicleEF	LHD1	2.5240e-003	2.5230e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	2.2500e-004	2.3400e-004
tblVehicleEF	LHD1	3.1170e-003	3.2550e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9460e-003	2.0180e-003
tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	0.24	0.24
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	6.8340e-003	6.9220e-003
tblVehicleEF	LHD1	9.8000e-005	9.9000e-005
tblVehicleEF	LHD1	3.1170e-003	3.2550e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.9460e-003	2.0180e-003
tblVehicleEF	LHD1	0.12	0.13
tblVehicleEF	LHD1	0.24	0.24
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	4.3870e-003	4.4760e-003
tblVehicleEF	LHD1	8.5210e-003	9.2200e-003
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.90	0.97
tblVehicleEF	LHD1	1.01	1.04
tblVehicleEF	LHD1	9.38	9.45

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	702.78	711.80
tblVehicleEF	LHD1	10.07	10.22
tblVehicleEF	LHD1	9.0900e-004	9.1200e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	1.36	1.49
tblVehicleEF	LHD1	0.30	0.30
tblVehicleEF	LHD1	1.0320e-003	1.0280e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.4500e-004	2.5500e-004
tblVehicleEF	LHD1	9.8800e-004	9.8300e-004
tblVehicleEF	LHD1	2.5240e-003	2.5230e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	2.2500e-004	2.3400e-004
tblVehicleEF	LHD1	1.3340e-003	1.3850e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	8.8100e-004	9.0500e-004
tblVehicleEF	LHD1	0.10	0.10
tblVehicleEF	LHD1	0.27	0.28
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	6.8340e-003	6.9220e-003
tblVehicleEF	LHD1	1.0000e-004	1.0100e-004
tblVehicleEF	LHD1	1.3340e-003	1.3850e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	8.8100e-004	9.0500e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	0.12	0.13
tblVehicleEF	LHD1	0.27	0.28
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD2	3.0110e-003	3.0890e-003
tblVehicleEF	LHD2	5.9010e-003	6.2600e-003
tblVehicleEF	LHD2	8.5190e-003	9.0470e-003
tblVehicleEF	LHD2	0.13	0.13
tblVehicleEF	LHD2	0.61	0.65
tblVehicleEF	LHD2	0.56	0.59
tblVehicleEF	LHD2	14.59	14.68
tblVehicleEF	LHD2	704.11	714.03
tblVehicleEF	LHD2	7.19	7.35
tblVehicleEF	LHD2	1.8700e-003	1.8760e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	1.33	1.45
tblVehicleEF	LHD2	0.18	0.19
tblVehicleEF	LHD2	1.4680e-003	1.4580e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.1500e-004	1.2000e-004
tblVehicleEF	LHD2	1.4050e-003	1.3940e-003
tblVehicleEF	LHD2	2.7120e-003	2.7090e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	1.1000e-004
tblVehicleEF	LHD2	9.2800e-004	9.7300e-004
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	6.2200e-004	6.3900e-004
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	1.3900e-004	1.4000e-004
tblVehicleEF	LHD2	6.7870e-003	6.8830e-003
tblVehicleEF	LHD2	7.1000e-005	7.3000e-005
tblVehicleEF	LHD2	9.2800e-004	9.7300e-004
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2200e-004	6.3900e-004
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	3.0200e-003	3.0970e-003
tblVehicleEF	LHD2	5.9520e-003	6.3180e-003
tblVehicleEF	LHD2	8.1300e-003	8.6340e-003
tblVehicleEF	LHD2	0.13	0.13
tblVehicleEF	LHD2	0.62	0.66
tblVehicleEF	LHD2	0.53	0.55
tblVehicleEF	LHD2	14.59	14.68
tblVehicleEF	LHD2	704.12	714.04
tblVehicleEF	LHD2	7.13	7.28
tblVehicleEF	LHD2	1.8710e-003	1.8770e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	1.28	1.39
tblVehicleEF	LHD2	0.17	0.18

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	1.4680e-003	1.4580e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.1500e-004	1.2000e-004
tblVehicleEF	LHD2	1.4050e-003	1.3940e-003
tblVehicleEF	LHD2	2.7120e-003	2.7090e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	1.1000e-004
tblVehicleEF	LHD2	1.4630e-003	1.5380e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0030e-003	1.0340e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	1.3900e-004	1.4000e-004
tblVehicleEF	LHD2	6.7870e-003	6.8830e-003
tblVehicleEF	LHD2	7.1000e-005	7.2000e-005
tblVehicleEF	LHD2	1.4630e-003	1.5380e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0030e-003	1.0340e-003
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	3.0060e-003	3.0840e-003
tblVehicleEF	LHD2	5.8710e-003	6.2260e-003
tblVehicleEF	LHD2	8.7600e-003	9.3040e-003
tblVehicleEF	LHD2	0.13	0.13

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	0.61	0.65
tblVehicleEF	LHD2	0.59	0.61
tblVehicleEF	LHD2	14.59	14.68
tblVehicleEF	LHD2	704.11	714.02
tblVehicleEF	LHD2	7.23	7.39
tblVehicleEF	LHD2	1.8690e-003	1.8750e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	1.32	1.44
tblVehicleEF	LHD2	0.19	0.20
tblVehicleEF	LHD2	1.4680e-003	1.4580e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.1500e-004	1.2000e-004
tblVehicleEF	LHD2	1.4050e-003	1.3940e-003
tblVehicleEF	LHD2	2.7120e-003	2.7090e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	1.1000e-004
tblVehicleEF	LHD2	6.4600e-004	6.7400e-004
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.5700e-004	4.6800e-004
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	1.3900e-004	1.4000e-004
tblVehicleEF	LHD2	6.7870e-003	6.8830e-003
tblVehicleEF	LHD2	7.2000e-005	7.3000e-005

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	6.4600e-004	6.7400e-004
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.5700e-004	4.6800e-004
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	MCY	0.33	0.33
tblVehicleEF	MCY	0.26	0.26
tblVehicleEF	MCY	19.84	20.16
tblVehicleEF	MCY	8.92	8.89
tblVehicleEF	MCY	210.33	210.21
tblVehicleEF	MCY	62.43	62.73
tblVehicleEF	MCY	0.07	0.07
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	1.17	1.18
tblVehicleEF	MCY	0.27	0.27
tblVehicleEF	MCY	1.9280e-003	1.9100e-003
tblVehicleEF	MCY	3.1490e-003	3.3460e-003
tblVehicleEF	MCY	1.8050e-003	1.7900e-003
tblVehicleEF	MCY	2.9700e-003	3.1600e-003
tblVehicleEF	MCY	0.92	0.92
tblVehicleEF	MCY	0.85	0.85
tblVehicleEF	MCY	0.57	0.57
tblVehicleEF	MCY	2.26	2.28
tblVehicleEF	MCY	0.79	0.81
tblVehicleEF	MCY	1.99	2.00
tblVehicleEF	MCY	2.0810e-003	2.0800e-003
tblVehicleEF	MCY	6.1800e-004	6.2100e-004

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MCY	0.92	0.92
tblVehicleEF	MCY	0.85	0.85
tblVehicleEF	MCY	0.57	0.57
tblVehicleEF	MCY	2.78	2.79
tblVehicleEF	MCY	0.79	0.81
tblVehicleEF	MCY	2.17	2.18
tblVehicleEF	MCY	0.32	0.32
tblVehicleEF	MCY	0.22	0.22
tblVehicleEF	MCY	18.46	18.73
tblVehicleEF	MCY	7.86	7.85
tblVehicleEF	MCY	207.82	207.61
tblVehicleEF	MCY	59.77	60.07
tblVehicleEF	MCY	0.06	0.06
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	0.25	0.25
tblVehicleEF	MCY	1.9280e-003	1.9100e-003
tblVehicleEF	MCY	3.1490e-003	3.3460e-003
tblVehicleEF	MCY	1.8050e-003	1.7900e-003
tblVehicleEF	MCY	2.9700e-003	3.1600e-003
tblVehicleEF	MCY	1.62	1.62
tblVehicleEF	MCY	0.90	0.91
tblVehicleEF	MCY	1.10	1.11
tblVehicleEF	MCY	2.17	2.18
tblVehicleEF	MCY	0.73	0.75
tblVehicleEF	MCY	1.69	1.70
tblVehicleEF	MCY	2.0570e-003	2.0550e-003
tblVehicleEF	MCY	5.9100e-004	5.9400e-004
tblVehicleEF	MCY	1.62	1.62

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MCY	0.90	0.91
tblVehicleEF	MCY	1.10	1.11
tblVehicleEF	MCY	2.66	2.67
tblVehicleEF	MCY	0.73	0.75
tblVehicleEF	MCY	1.84	1.85
tblVehicleEF	MCY	0.34	0.34
tblVehicleEF	MCY	0.28	0.28
tblVehicleEF	MCY	20.80	21.15
tblVehicleEF	MCY	9.60	9.57
tblVehicleEF	MCY	212.07	212.00
tblVehicleEF	MCY	64.14	64.44
tblVehicleEF	MCY	0.07	0.07
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	1.18	1.19
tblVehicleEF	MCY	0.28	0.28
tblVehicleEF	MCY	1.9280e-003	1.9100e-003
tblVehicleEF	MCY	3.1490e-003	3.3460e-003
tblVehicleEF	MCY	1.8050e-003	1.7900e-003
tblVehicleEF	MCY	2.9700e-003	3.1600e-003
tblVehicleEF	MCY	0.60	0.60
tblVehicleEF	MCY	1.05	1.07
tblVehicleEF	MCY	0.36	0.36
tblVehicleEF	MCY	2.32	2.34
tblVehicleEF	MCY	0.92	0.94
tblVehicleEF	MCY	2.18	2.19
tblVehicleEF	MCY	2.0990e-003	2.0980e-003
tblVehicleEF	MCY	6.3500e-004	6.3800e-004
tblVehicleEF	MCY	0.60	0.60
tblVehicleEF	MCY	1.05	1.07

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MCY	0.36	0.36
tblVehicleEF	MCY	2.85	2.86
tblVehicleEF	MCY	0.92	0.94
tblVehicleEF	MCY	2.37	2.39
tblVehicleEF	MDV	4.1230e-003	4.6570e-003
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.88	0.96
tblVehicleEF	MDV	3.21	3.40
tblVehicleEF	MDV	388.99	398.83
tblVehicleEF	MDV	84.30	86.53
tblVehicleEF	MDV	8.8130e-003	9.5820e-003
tblVehicleEF	MDV	0.03	0.04
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.35	0.38
tblVehicleEF	MDV	1.4960e-003	1.5600e-003
tblVehicleEF	MDV	1.8690e-003	1.9670e-003
tblVehicleEF	MDV	1.3810e-003	1.4400e-003
tblVehicleEF	MDV	1.7180e-003	1.8090e-003
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.41	0.45
tblVehicleEF	MDV	3.7690e-003	3.8940e-003
tblVehicleEF	MDV	8.1700e-004	8.4600e-004
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.08	0.08

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.45	0.50
tblVehicleEF	MDV	4.3840e-003	4.9430e-003
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.94	1.03
tblVehicleEF	MDV	2.66	2.81
tblVehicleEF	MDV	398.35	408.52
tblVehicleEF	MDV	83.23	85.40
tblVehicleEF	MDV	8.2250e-003	8.9290e-003
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.32	0.35
tblVehicleEF	MDV	1.4960e-003	1.5600e-003
tblVehicleEF	MDV	1.8690e-003	1.9670e-003
tblVehicleEF	MDV	1.3810e-003	1.4400e-003
tblVehicleEF	MDV	1.7180e-003	1.8090e-003
tblVehicleEF	MDV	0.12	0.13
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.13	0.14
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.36	0.40
tblVehicleEF	MDV	3.8590e-003	3.9890e-003
tblVehicleEF	MDV	8.0700e-004	8.3500e-004
tblVehicleEF	MDV	0.12	0.13
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.13	0.14
tblVehicleEF	MDV	0.03	0.03

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.40	0.43
tblVehicleEF	MDV	4.0380e-003	4.5660e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.87	0.95
tblVehicleEF	MDV	3.53	3.74
tblVehicleEF	MDV	387.41	397.20
tblVehicleEF	MDV	84.92	87.19
tblVehicleEF	MDV	8.9000e-003	9.6800e-003
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.37	0.40
tblVehicleEF	MDV	1.4960e-003	1.5600e-003
tblVehicleEF	MDV	1.8690e-003	1.9670e-003
tblVehicleEF	MDV	1.3810e-003	1.4400e-003
tblVehicleEF	MDV	1.7180e-003	1.8090e-003
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.17	0.18
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.44	0.49
tblVehicleEF	MDV	3.7530e-003	3.8780e-003
tblVehicleEF	MDV	8.2300e-004	8.5200e-004
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.17	0.18
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.09	0.09

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	0.49	0.53
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.28	1.44
tblVehicleEF	MH	2.05	2.14
tblVehicleEF	MH	1,507.51	1,527.26
tblVehicleEF	MH	18.41	18.86
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.66	1.68
tblVehicleEF	MH	0.25	0.25
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.4300e-004	2.5600e-004
tblVehicleEF	MH	3.2940e-003	3.2880e-003
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.2300e-004	2.3500e-004
tblVehicleEF	MH	0.71	0.75
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.33	0.34
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.8200e-004	1.8700e-004
tblVehicleEF	MH	0.71	0.75
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.33	0.34
tblVehicleEF	MH	0.10	0.11

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.32	1.49
tblVehicleEF	MH	1.91	1.99
tblVehicleEF	MH	1,507.57	1,527.34
tblVehicleEF	MH	18.17	18.60
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	1.57	1.60
tblVehicleEF	MH	0.23	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.4300e-004	2.5600e-004
tblVehicleEF	MH	3.2940e-003	3.2880e-003
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.2300e-004	2.3500e-004
tblVehicleEF	MH	1.10	1.17
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.52	0.55
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.09	0.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.8000e-004	1.8400e-004
tblVehicleEF	MH	1.10	1.17
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.52	0.55

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.26	1.42
tblVehicleEF	MH	2.13	2.22
tblVehicleEF	MH	1,507.46	1,527.22
tblVehicleEF	MH	18.55	19.00
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.65	1.68
tblVehicleEF	MH	0.26	0.26
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.4300e-004	2.5600e-004
tblVehicleEF	MH	3.2940e-003	3.2880e-003
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.2300e-004	2.3500e-004
tblVehicleEF	MH	0.51	0.54
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.24	0.25
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.8400e-004	1.8800e-004
tblVehicleEF	MH	0.51	0.54
tblVehicleEF	MH	0.08	0.08

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.24	0.25
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.11	0.11
tblVehicleEF	MHD	3.2810e-003	3.3490e-003
tblVehicleEF	MHD	2.0190e-003	2.3440e-003
tblVehicleEF	MHD	9.1410e-003	9.7650e-003
tblVehicleEF	MHD	0.36	0.37
tblVehicleEF	MHD	0.26	0.30
tblVehicleEF	MHD	1.08	1.17
tblVehicleEF	MHD	68.31	69.46
tblVehicleEF	MHD	1,019.09	1,034.77
tblVehicleEF	MHD	8.80	9.28
tblVehicleEF	MHD	9.8740e-003	0.01
tblVehicleEF	MHD	0.13	0.14
tblVehicleEF	MHD	6.6810e-003	6.8530e-003
tblVehicleEF	MHD	0.40	0.42
tblVehicleEF	MHD	1.44	1.45
tblVehicleEF	MHD	1.70	1.68
tblVehicleEF	MHD	3.8000e-004	4.3900e-004
tblVehicleEF	MHD	8.9210e-003	8.9900e-003
tblVehicleEF	MHD	1.0400e-004	1.1100e-004
tblVehicleEF	MHD	3.6300e-004	4.2000e-004
tblVehicleEF	MHD	8.5300e-003	8.5960e-003
tblVehicleEF	MHD	9.6000e-005	1.0200e-004
tblVehicleEF	MHD	3.7300e-004	4.1100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.4700e-004	2.6700e-004

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	6.4800e-004	6.5900e-004
tblVehicleEF	MHD	9.7110e-003	9.8620e-003
tblVehicleEF	MHD	8.7000e-005	9.2000e-005
tblVehicleEF	MHD	3.7300e-004	4.1100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.4700e-004	2.6700e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.06
tblVehicleEF	MHD	3.0880e-003	3.1480e-003
tblVehicleEF	MHD	2.0630e-003	2.3970e-003
tblVehicleEF	MHD	8.7090e-003	9.3010e-003
tblVehicleEF	MHD	0.30	0.30
tblVehicleEF	MHD	0.26	0.30
tblVehicleEF	MHD	1.01	1.10
tblVehicleEF	MHD	68.45	69.70
tblVehicleEF	MHD	1,019.09	1,034.78
tblVehicleEF	MHD	8.68	9.15
tblVehicleEF	MHD	9.8530e-003	0.01
tblVehicleEF	MHD	0.13	0.14
tblVehicleEF	MHD	6.4510e-003	6.6180e-003
tblVehicleEF	MHD	0.40	0.42
tblVehicleEF	MHD	1.38	1.39
tblVehicleEF	MHD	1.70	1.68
tblVehicleEF	MHD	3.2300e-004	3.7300e-004

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	8.9210e-003	8.9900e-003
tblVehicleEF	MHD	1.0400e-004	1.1100e-004
tblVehicleEF	MHD	3.0900e-004	3.5700e-004
tblVehicleEF	MHD	8.5300e-003	8.5960e-003
tblVehicleEF	MHD	9.6000e-005	1.0200e-004
tblVehicleEF	MHD	5.9900e-004	6.6300e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.0600e-004	4.4100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	6.4900e-004	6.6100e-004
tblVehicleEF	MHD	9.7120e-003	9.8620e-003
tblVehicleEF	MHD	8.6000e-005	9.1000e-005
tblVehicleEF	MHD	5.9900e-004	6.6300e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.0600e-004	4.4100e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.06
tblVehicleEF	MHD	3.4680e-003	3.5400e-003
tblVehicleEF	MHD	1.9930e-003	2.3130e-003
tblVehicleEF	MHD	9.4030e-003	0.01
tblVehicleEF	MHD	0.42	0.43
tblVehicleEF	MHD	0.25	0.29
tblVehicleEF	MHD	1.13	1.23
tblVehicleEF	MHD	68.25	69.27

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	1,019.08	1,034.76
tblVehicleEF	MHD	8.88	9.37
tblVehicleEF	MHD	9.9080e-003	0.01
tblVehicleEF	MHD	0.13	0.14
tblVehicleEF	MHD	6.8910e-003	7.0690e-003
tblVehicleEF	MHD	0.41	0.43
tblVehicleEF	MHD	1.42	1.44
tblVehicleEF	MHD	1.70	1.69
tblVehicleEF	MHD	4.5800e-004	5.3000e-004
tblVehicleEF	MHD	8.9210e-003	8.9900e-003
tblVehicleEF	MHD	1.0400e-004	1.1100e-004
tblVehicleEF	MHD	4.3800e-004	5.0700e-004
tblVehicleEF	MHD	8.5300e-003	8.5960e-003
tblVehicleEF	MHD	9.6000e-005	1.0200e-004
tblVehicleEF	MHD	2.5600e-004	2.8100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.8000e-004	1.9300e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	6.4700e-004	6.5700e-004
tblVehicleEF	MHD	9.7110e-003	9.8620e-003
tblVehicleEF	MHD	8.8000e-005	9.3000e-005
tblVehicleEF	MHD	2.5600e-004	2.8100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.8000e-004	1.9300e-004
tblVehicleEF	MHD	0.02	0.03

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	OBUS	7.9900e-003	8.0370e-003
tblVehicleEF	OBUS	7.5690e-003	8.7220e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.50	0.49
tblVehicleEF	OBUS	0.89	1.03
tblVehicleEF	OBUS	2.72	2.81
tblVehicleEF	OBUS	70.02	68.39
tblVehicleEF	OBUS	1,394.70	1,421.03
tblVehicleEF	OBUS	20.09	20.60
tblVehicleEF	OBUS	8.9990e-003	8.6950e-003
tblVehicleEF	OBUS	0.11	0.11
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.26	0.25
tblVehicleEF	OBUS	1.26	1.25
tblVehicleEF	OBUS	0.82	0.80
tblVehicleEF	OBUS	8.5000e-005	8.1000e-005
tblVehicleEF	OBUS	6.9550e-003	6.6020e-003
tblVehicleEF	OBUS	2.0400e-004	2.0900e-004
tblVehicleEF	OBUS	8.1000e-005	7.8000e-005
tblVehicleEF	OBUS	6.6370e-003	6.2990e-003
tblVehicleEF	OBUS	1.8800e-004	1.9200e-004
tblVehicleEF	OBUS	1.6770e-003	1.7310e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	9.0800e-004	9.2500e-004
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.09	0.09

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	6.6800e-004	6.5300e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.9900e-004	2.0400e-004
tblVehicleEF	OBUS	1.6770e-003	1.7310e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	9.0800e-004	9.2500e-004
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.14	0.14
tblVehicleEF	OBUS	8.0580e-003	8.1030e-003
tblVehicleEF	OBUS	7.7810e-003	8.9710e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.50	0.49
tblVehicleEF	OBUS	0.92	1.05
tblVehicleEF	OBUS	2.53	2.62
tblVehicleEF	OBUS	69.26	67.66
tblVehicleEF	OBUS	1,394.74	1,421.08
tblVehicleEF	OBUS	19.77	20.27
tblVehicleEF	OBUS	8.8840e-003	8.5840e-003
tblVehicleEF	OBUS	0.11	0.11
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.25	0.24
tblVehicleEF	OBUS	1.20	1.18
tblVehicleEF	OBUS	0.80	0.78
tblVehicleEF	OBUS	7.5000e-005	7.2000e-005
tblVehicleEF	OBUS	6.9550e-003	6.6020e-003
tblVehicleEF	OBUS	2.0400e-004	2.0900e-004

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	7.2000e-005	6.9000e-005
tblVehicleEF	OBUS	6.6370e-003	6.2990e-003
tblVehicleEF	OBUS	1.8800e-004	1.9200e-004
tblVehicleEF	OBUS	2.6160e-003	2.7120e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	1.4530e-003	1.4870e-003
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	6.6100e-004	6.4600e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.9600e-004	2.0100e-004
tblVehicleEF	OBUS	2.6160e-003	2.7120e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	1.4530e-003	1.4870e-003
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.13	0.14
tblVehicleEF	OBUS	7.9130e-003	7.9630e-003
tblVehicleEF	OBUS	7.4480e-003	8.5800e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.50	0.49
tblVehicleEF	OBUS	0.88	1.01
tblVehicleEF	OBUS	2.82	2.92
tblVehicleEF	OBUS	71.07	69.41
tblVehicleEF	OBUS	1,394.67	1,421.00
tblVehicleEF	OBUS	20.27	20.78

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	9.1630e-003	8.8530e-003
tblVehicleEF	OBUS	0.11	0.11
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.28	0.27
tblVehicleEF	OBUS	1.25	1.24
tblVehicleEF	OBUS	0.83	0.81
tblVehicleEF	OBUS	9.8000e-005	9.4000e-005
tblVehicleEF	OBUS	6.9550e-003	6.6020e-003
tblVehicleEF	OBUS	2.0400e-004	2.0900e-004
tblVehicleEF	OBUS	9.4000e-005	9.0000e-005
tblVehicleEF	OBUS	6.6370e-003	6.2990e-003
tblVehicleEF	OBUS	1.8800e-004	1.9200e-004
tblVehicleEF	OBUS	1.2110e-003	1.2440e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	6.7500e-004	6.8600e-004
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	6.7800e-004	6.6200e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	2.0100e-004	2.0600e-004
tblVehicleEF	OBUS	1.2110e-003	1.2440e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	6.7500e-004	6.8600e-004
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.14	0.15

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	0.06	0.06
tblVehicleEF	SBUS	8.7580e-003	9.6490e-003
tblVehicleEF	SBUS	6.3970e-003	6.4810e-003
tblVehicleEF	SBUS	2.28	2.26
tblVehicleEF	SBUS	0.79	0.87
tblVehicleEF	SBUS	0.89	0.93
tblVehicleEF	SBUS	358.06	359.37
tblVehicleEF	SBUS	1,074.49	1,081.95
tblVehicleEF	SBUS	4.74	4.81
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	5.1790e-003	5.0570e-003
tblVehicleEF	SBUS	3.89	3.96
tblVehicleEF	SBUS	4.78	4.94
tblVehicleEF	SBUS	0.65	0.61
tblVehicleEF	SBUS	3.9690e-003	4.2250e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.2000e-005	3.3000e-005
tblVehicleEF	SBUS	3.7970e-003	4.0430e-003
tblVehicleEF	SBUS	2.6630e-003	2.6610e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	2.9000e-005	3.0000e-005
tblVehicleEF	SBUS	1.0280e-003	1.0980e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.26	0.26
tblVehicleEF	SBUS	5.4200e-004	5.5100e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.02

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4100e-003	3.4220e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.7000e-005	4.8000e-005
tblVehicleEF	SBUS	1.0280e-003	1.0980e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.38	0.37
tblVehicleEF	SBUS	5.4200e-004	5.5100e-004
tblVehicleEF	SBUS	0.12	0.13
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.06	0.06
tblVehicleEF	SBUS	8.9030e-003	9.8160e-003
tblVehicleEF	SBUS	5.6780e-003	5.7510e-003
tblVehicleEF	SBUS	2.24	2.22
tblVehicleEF	SBUS	0.80	0.89
tblVehicleEF	SBUS	0.72	0.75
tblVehicleEF	SBUS	369.44	371.14
tblVehicleEF	SBUS	1,074.52	1,081.98
tblVehicleEF	SBUS	4.45	4.51
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	5.0060e-003	4.8880e-003
tblVehicleEF	SBUS	4.00	4.07
tblVehicleEF	SBUS	4.59	4.74
tblVehicleEF	SBUS	0.65	0.61
tblVehicleEF	SBUS	3.3520e-003	3.5680e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	3.2000e-005	3.3000e-005
tblVehicleEF	SBUS	3.2070e-003	3.4140e-003
tblVehicleEF	SBUS	2.6630e-003	2.6610e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	2.9000e-005	3.0000e-005
tblVehicleEF	SBUS	1.5850e-003	1.7070e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.26	0.26
tblVehicleEF	SBUS	8.2800e-004	8.5000e-004
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.5180e-003	3.5340e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.4000e-005	4.5000e-005
tblVehicleEF	SBUS	1.5850e-003	1.7070e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.38	0.37
tblVehicleEF	SBUS	8.2800e-004	8.5000e-004
tblVehicleEF	SBUS	0.12	0.13
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.06	0.06
tblVehicleEF	SBUS	8.6810e-003	9.5600e-003
tblVehicleEF	SBUS	6.7490e-003	6.8370e-003
tblVehicleEF	SBUS	2.34	2.31
tblVehicleEF	SBUS	0.78	0.86
tblVehicleEF	SBUS	0.98	1.02
tblVehicleEF	SBUS	342.35	343.13

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	1,074.48	1,081.93
tblVehicleEF	SBUS	4.88	4.95
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	5.3330e-003	5.2070e-003
tblVehicleEF	SBUS	3.75	3.81
tblVehicleEF	SBUS	4.73	4.89
tblVehicleEF	SBUS	0.66	0.62
tblVehicleEF	SBUS	4.8210e-003	5.1330e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.2000e-005	3.3000e-005
tblVehicleEF	SBUS	4.6120e-003	4.9110e-003
tblVehicleEF	SBUS	2.6630e-003	2.6610e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	2.9000e-005	3.0000e-005
tblVehicleEF	SBUS	7.5500e-004	8.0400e-004
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.26	0.26
tblVehicleEF	SBUS	4.1300e-004	4.1900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.2620e-003	3.2690e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.8000e-005	4.9000e-005
tblVehicleEF	SBUS	7.5500e-004	8.0400e-004
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.38	0.38

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	4.1300e-004	4.1900e-004
tblVehicleEF	SBUS	0.12	0.13
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	UBUS	1.69	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	12.85	12.68
tblVehicleEF	UBUS	1.35	1.35
tblVehicleEF	UBUS	1,572.92	1,581.14
tblVehicleEF	UBUS	15.19	15.29
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.50	0.57
tblVehicleEF	UBUS	0.15	0.15
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5100e-003	4.4900e-003
tblVehicleEF	UBUS	1.4900e-004	1.4500e-004
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	6.2400e-003	6.2410e-003
tblVehicleEF	UBUS	4.3010e-003	4.2820e-003
tblVehicleEF	UBUS	1.3700e-004	1.3300e-004
tblVehicleEF	UBUS	6.8000e-004	6.2100e-004
tblVehicleEF	UBUS	9.7270e-003	8.5820e-003
tblVehicleEF	UBUS	5.3300e-004	4.7800e-004
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	2.4830e-003	2.1230e-003
tblVehicleEF	UBUS	0.08	0.07
tblVehicleEF	UBUS	9.5600e-003	9.7130e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	1.5000e-004	1.5100e-004
tblVehicleEF	UBUS	6.8000e-004	6.2100e-004
tblVehicleEF	UBUS	9.7270e-003	8.5820e-003
tblVehicleEF	UBUS	5.3300e-004	4.7800e-004
tblVehicleEF	UBUS	1.74	1.71
tblVehicleEF	UBUS	2.4830e-003	2.1230e-003
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	1.69	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	12.85	12.68
tblVehicleEF	UBUS	1.15	1.16
tblVehicleEF	UBUS	1,572.93	1,581.15
tblVehicleEF	UBUS	14.86	14.96
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.50	0.56
tblVehicleEF	UBUS	0.14	0.14
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5100e-003	4.4900e-003
tblVehicleEF	UBUS	1.4900e-004	1.4500e-004
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	6.2400e-003	6.2410e-003
tblVehicleEF	UBUS	4.3010e-003	4.2820e-003
tblVehicleEF	UBUS	1.3700e-004	1.3300e-004
tblVehicleEF	UBUS	1.0570e-003	9.7200e-004
tblVehicleEF	UBUS	0.01	8.9120e-003
tblVehicleEF	UBUS	8.9500e-004	8.0700e-004
tblVehicleEF	UBUS	0.03	0.03

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	2.2050e-003	1.8900e-003
tblVehicleEF	UBUS	0.07	0.07
tblVehicleEF	UBUS	9.5600e-003	9.7130e-003
tblVehicleEF	UBUS	1.4700e-004	1.4800e-004
tblVehicleEF	UBUS	1.0570e-003	9.7200e-004
tblVehicleEF	UBUS	0.01	8.9120e-003
tblVehicleEF	UBUS	8.9500e-004	8.0700e-004
tblVehicleEF	UBUS	1.74	1.71
tblVehicleEF	UBUS	2.2050e-003	1.8900e-003
tblVehicleEF	UBUS	0.08	0.07
tblVehicleEF	UBUS	1.69	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	12.85	12.68
tblVehicleEF	UBUS	1.46	1.47
tblVehicleEF	UBUS	1,572.92	1,581.14
tblVehicleEF	UBUS	15.39	15.49
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.50	0.57
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5100e-003	4.4900e-003
tblVehicleEF	UBUS	1.4900e-004	1.4500e-004
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	6.2400e-003	6.2410e-003
tblVehicleEF	UBUS	4.3010e-003	4.2820e-003
tblVehicleEF	UBUS	1.3700e-004	1.3300e-004
tblVehicleEF	UBUS	4.9100e-004	4.4600e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	0.01	9.1860e-003
tblVehicleEF	UBUS	3.8400e-004	3.4300e-004
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	3.0840e-003	2.6240e-003
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	9.5600e-003	9.7130e-003
tblVehicleEF	UBUS	1.5200e-004	1.5300e-004
tblVehicleEF	UBUS	4.9100e-004	4.4600e-004
tblVehicleEF	UBUS	0.01	9.1860e-003
tblVehicleEF	UBUS	3.8400e-004	3.4300e-004
tblVehicleEF	UBUS	1.74	1.71
tblVehicleEF	UBUS	3.0840e-003	2.6240e-003
tblVehicleEF	UBUS	0.09	0.09

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.6288	7.0720	5.5561	0.0125	0.6124	0.2562	0.8686	0.0790	0.2357	0.3148	0.0000	1,213.8610	1,213.8610	0.3717	1.9200e-003	1,223.7264
Maximum	**0.6288**	**7.0720**	**5.5561**	**0.0125**	**0.6124**	**0.2562**	**0.8686**	**0.0790**	**0.2357**	**0.3148**	**0.0000**	**1,213.8610**	**1,213.8610**	**0.3717**	**1.9200e-003**	**1,223.7264**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.6288	7.0720	5.5561	0.0125	0.3208	0.2562	0.5770	0.0476	0.2357	0.2833	0.0000	1,213.8610	1,213.8610	0.3717	1.9200e-003	1,223.7264
Maximum	**0.6288**	**7.0720**	**5.5561**	**0.0125**	**0.3208**	**0.2562**	**0.5770**	**0.0476**	**0.2357**	**0.2833**	**0.0000**	**1,213.8610**	**1,213.8610**	**0.3717**	**1.9200e-003**	**1,223.7264**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**47.62**	**0.00**	**33.57**	**39.84**	**0.00**	**10.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3000e-004	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.3000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0000**	**1.0000e-004**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3000e-004	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.3000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0000**	**1.0000e-004**

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/4/2023	9/4/2023	5	1	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.01

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Skid Steer Loaders	1	8.00	65	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5999	7.0534	5.3093	0.0118		0.2558	0.2558		0.2354	0.2354		1,142.9179	1,142.9179	0.3696		1,152.1590
Total	**0.5999**	**7.0534**	**5.3093**	**0.0118**	**0.5303**	**0.2558**	**0.7861**	**0.0573**	**0.2354**	**0.2926**		**1,142.9179**	**1,142.9179**	**0.3696**		**1,152.1590**

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0289	0.0186	0.2468	6.9000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9432	70.9432	2.0900e-003	1.9200e-003	71.5675
Total	**0.0289**	**0.0186**	**0.2468**	**6.9000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**70.9432**	**70.9432**	**2.0900e-003**	**1.9200e-003**	**71.5675**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	0.5999	7.0534	5.3093	0.0118		0.2558	0.2558		0.2354	0.2354	0.0000	1,142.9179	1,142.9179	0.3696		1,152.1590
Total	**0.5999**	**7.0534**	**5.3093**	**0.0118**	**0.2386**	**0.2558**	**0.4944**	**0.0258**	**0.2354**	**0.2611**	**0.0000**	**1,142.9179**	**1,142.9179**	**0.3696**		**1,152.1590**

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0289	0.0186	0.2468	6.9000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9432	70.9432	2.0900e-003	1.9200e-003	71.5675
Total	**0.0289**	**0.0186**	**0.2468**	**6.9000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**70.9432**	**70.9432**	**2.0900e-003**	**1.9200e-003**	**71.5675**

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.513608	0.056184	0.190534	0.143608	0.031407	0.007983	0.010518	0.006055	0.000837	0.000446	0.030807	0.001563	0.006450

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3000e-004	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004
Unmitigated	2.3000e-004	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.0000e-005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004
Total	**2.3000e-004**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**9.0000e-005**	**9.0000e-005**	**0.0000**		**1.0000e-004**

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.0000e-005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004
Total	**2.3000e-004**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**9.0000e-005**	**9.0000e-005**	**0.0000**		**1.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Temporary Pump Station A

South Central Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	0.42	1000sqft	0.01	418.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on the dimensions of the temporary booster pump station. (22 feet by 19 feet = 418 square feet ground distrubance)

Construction Phase - Adjusted construction schedule to meet applicant provided schedule. Assume no paving and architectural coating for temporary pump station.

Trips and VMT - Worker trips provided by the applicant.

Grading -

Off-road Equipment - Equipment list provided by the applicant.

Construction Off-road Equipment Mitigation - Per VCAPCD Rule 55.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	6.1320e-003	6.0550e-003
tblFleetMix	LDA	0.52	0.51

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT2	0.19	0.19
tblFleetMix	LHD1	0.03	0.03
tblFleetMix	LHD2	7.8410e-003	7.9830e-003
tblFleetMix	MCY	0.03	0.03
tblFleetMix	MDV	0.14	0.14
tblFleetMix	MH	6.1180e-003	6.4500e-003
tblFleetMix	MHD	0.01	0.01
tblFleetMix	OBUS	8.2400e-004	8.3700e-004
tblFleetMix	SBUS	1.5440e-003	1.5630e-003
tblFleetMix	UBUS	4.4200e-004	4.4600e-004
tblLandUse	LandUseSquareFeet	420.00	418.00
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblTripsAndVMT	WorkerTripNumber	8.00	10.00
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	6.17	6.14
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	6.4060e-003	6.1290e-003
tblVehicleEF	HHD	1,034.77	1,047.01
tblVehicleEF	HHD	1,402.11	1,426.18
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.16	0.17
tblVehicleEF	HHD	0.22	0.23
tblVehicleEF	HHD	2.6000e-005	3.2000e-005
tblVehicleEF	HHD	5.48	5.52
tblVehicleEF	HHD	2.85	2.92
tblVehicleEF	HHD	2.49	2.48
tblVehicleEF	HHD	3.3150e-003	3.4930e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	2.0000e-006
tblVehicleEF	HHD	3.1710e-003	3.3420e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7930e-003	8.7900e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	3.0000e-006	4.0000e-006
tblVehicleEF	HHD	1.9700e-004	2.5200e-004
tblVehicleEF	HHD	0.42	0.42
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.4000e-005	1.2600e-004
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	9.5520e-003	9.6730e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	3.0000e-006	4.0000e-006
tblVehicleEF	HHD	1.9700e-004	2.5200e-004
tblVehicleEF	HHD	0.48	0.48
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	0.12	0.12
tblVehicleEF	HHD	8.4000e-005	1.2600e-004
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	6.08	6.05
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	5.9790e-003	5.7210e-003
tblVehicleEF	HHD	1,024.20	1,036.61

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	1,402.11	1,426.18
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.16	0.16
tblVehicleEF	HHD	0.22	0.23
tblVehicleEF	HHD	2.5000e-005	3.1000e-005
tblVehicleEF	HHD	5.26	5.30
tblVehicleEF	HHD	2.74	2.81
tblVehicleEF	HHD	2.49	2.48
tblVehicleEF	HHD	2.8760e-003	3.0250e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	2.0000e-006
tblVehicleEF	HHD	2.7510e-003	2.8940e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7930e-003	8.7900e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	6.0000e-006	7.0000e-006
tblVehicleEF	HHD	1.9800e-004	2.5200e-004
tblVehicleEF	HHD	0.44	0.44
tblVehicleEF	HHD	4.0000e-006	5.0000e-006
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.2000e-005	1.2200e-004
tblVehicleEF	HHD	9.4530e-003	9.5760e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.0000e-006	7.0000e-006
tblVehicleEF	HHD	1.9800e-004	2.5200e-004
tblVehicleEF	HHD	0.51	0.51
tblVehicleEF	HHD	4.0000e-006	5.0000e-006

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.12	0.12
tblVehicleEF	HHD	8.2000e-005	1.2200e-004
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	0.00	1.0000e-006
tblVehicleEF	HHD	6.30	6.27
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	6.6800e-003	6.3920e-003
tblVehicleEF	HHD	1,049.38	1,061.39
tblVehicleEF	HHD	1,402.11	1,426.18
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.17	0.17
tblVehicleEF	HHD	0.22	0.23
tblVehicleEF	HHD	2.7000e-005	3.3000e-005
tblVehicleEF	HHD	5.79	5.83
tblVehicleEF	HHD	2.82	2.89
tblVehicleEF	HHD	2.49	2.48
tblVehicleEF	HHD	3.9220e-003	4.1380e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	2.0000e-006
tblVehicleEF	HHD	3.7520e-003	3.9590e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7930e-003	8.7900e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	2.1900e-004	2.8300e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.38	0.38
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	9.1000e-005	1.3500e-004
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	9.6880e-003	9.8080e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	2.1900e-004	2.8300e-004
tblVehicleEF	HHD	0.44	0.44
tblVehicleEF	HHD	0.12	0.12
tblVehicleEF	HHD	9.1000e-005	1.3500e-004
tblVehicleEF	LDA	1.8920e-003	2.1510e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.54	0.58
tblVehicleEF	LDA	2.15	2.23
tblVehicleEF	LDA	243.01	248.89
tblVehicleEF	LDA	51.93	53.20
tblVehicleEF	LDA	4.2670e-003	4.5780e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.18	0.19
tblVehicleEF	LDA	1.3730e-003	1.4360e-003
tblVehicleEF	LDA	1.7560e-003	1.8310e-003
tblVehicleEF	LDA	1.2650e-003	1.3240e-003
tblVehicleEF	LDA	1.6140e-003	1.6840e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	7.2190e-003	8.3800e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.21	0.23
tblVehicleEF	LDA	2.3550e-003	2.4310e-003
tblVehicleEF	LDA	5.0300e-004	5.2000e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.23	0.26
tblVehicleEF	LDA	2.0220e-003	2.2970e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.59	0.63
tblVehicleEF	LDA	1.79	1.85
tblVehicleEF	LDA	252.11	258.22
tblVehicleEF	LDA	51.25	52.49
tblVehicleEF	LDA	3.9500e-003	4.2360e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.16	0.17
tblVehicleEF	LDA	1.3730e-003	1.4360e-003
tblVehicleEF	LDA	1.7560e-003	1.8310e-003
tblVehicleEF	LDA	1.2650e-003	1.3240e-003
tblVehicleEF	LDA	1.6140e-003	1.6840e-003
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	7.6170e-003	8.8360e-003
tblVehicleEF	LDA	0.02	0.02

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	0.19	0.20
tblVehicleEF	LDA	2.4440e-003	2.5230e-003
tblVehicleEF	LDA	4.9700e-004	5.1300e-004
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.20	0.22
tblVehicleEF	LDA	1.8490e-003	2.1030e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.54	0.58
tblVehicleEF	LDA	2.37	2.45
tblVehicleEF	LDA	241.44	247.28
tblVehicleEF	LDA	52.33	53.61
tblVehicleEF	LDA	4.3140e-003	4.6290e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.19	0.20
tblVehicleEF	LDA	1.3730e-003	1.4360e-003
tblVehicleEF	LDA	1.7560e-003	1.8310e-003
tblVehicleEF	LDA	1.2650e-003	1.3240e-003
tblVehicleEF	LDA	1.6140e-003	1.6840e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	7.1030e-003	8.2500e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.23	0.25

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	2.3400e-003	2.4160e-003
tblVehicleEF	LDA	5.0700e-004	5.2400e-004
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.25	0.27
tblVehicleEF	LDT1	4.2150e-003	4.7780e-003
tblVehicleEF	LDT1	0.07	0.07
tblVehicleEF	LDT1	0.94	1.03
tblVehicleEF	LDT1	2.37	2.46
tblVehicleEF	LDT1	293.37	299.13
tblVehicleEF	LDT1	63.65	64.92
tblVehicleEF	LDT1	6.5420e-003	7.1830e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.25	0.26
tblVehicleEF	LDT1	1.7680e-003	1.8830e-003
tblVehicleEF	LDT1	2.2640e-003	2.4020e-003
tblVehicleEF	LDT1	1.6280e-003	1.7340e-003
tblVehicleEF	LDT1	2.0810e-003	2.2080e-003
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.32	0.36
tblVehicleEF	LDT1	2.8440e-003	2.9230e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	6.1700e-004	6.3400e-004
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.36	0.39
tblVehicleEF	LDT1	4.4800e-003	5.0750e-003
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	1.01	1.11
tblVehicleEF	LDT1	1.97	2.04
tblVehicleEF	LDT1	302.82	308.81
tblVehicleEF	LDT1	62.85	64.08
tblVehicleEF	LDT1	5.9940e-003	6.5810e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.22	0.24
tblVehicleEF	LDT1	1.7680e-003	1.8830e-003
tblVehicleEF	LDT1	2.2640e-003	2.4020e-003
tblVehicleEF	LDT1	1.6280e-003	1.7340e-003
tblVehicleEF	LDT1	2.0810e-003	2.2080e-003
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.08	0.08
tblVehicleEF	LDT1	0.28	0.31
tblVehicleEF	LDT1	2.9360e-003	3.0180e-003
tblVehicleEF	LDT1	6.0900e-004	6.2600e-004

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.08	0.08
tblVehicleEF	LDT1	0.31	0.34
tblVehicleEF	LDT1	4.1260e-003	4.6790e-003
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.93	1.02
tblVehicleEF	LDT1	2.61	2.71
tblVehicleEF	LDT1	291.74	297.46
tblVehicleEF	LDT1	64.12	65.41
tblVehicleEF	LDT1	6.6350e-003	7.2860e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.26	0.28
tblVehicleEF	LDT1	1.7680e-003	1.8830e-003
tblVehicleEF	LDT1	2.2640e-003	2.4020e-003
tblVehicleEF	LDT1	1.6280e-003	1.7340e-003
tblVehicleEF	LDT1	2.0810e-003	2.2080e-003
tblVehicleEF	LDT1	0.06	0.07
tblVehicleEF	LDT1	0.20	0.22
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.11	0.11
tblVehicleEF	LDT1	0.35	0.38
tblVehicleEF	LDT1	2.8280e-003	2.9070e-003
tblVehicleEF	LDT1	6.2200e-004	6.3900e-004
tblVehicleEF	LDT1	0.06	0.07

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	0.20	0.22
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.11	0.11
tblVehicleEF	LDT1	0.38	0.42
tblVehicleEF	LDT2	3.7520e-003	4.1960e-003
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.85	0.93
tblVehicleEF	LDT2	2.84	2.93
tblVehicleEF	LDT2	315.70	324.31
tblVehicleEF	LDT2	69.42	71.32
tblVehicleEF	LDT2	6.9230e-003	7.5900e-003
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.30	0.33
tblVehicleEF	LDT2	1.4500e-003	1.5020e-003
tblVehicleEF	LDT2	1.8750e-003	1.9440e-003
tblVehicleEF	LDT2	1.3350e-003	1.3830e-003
tblVehicleEF	LDT2	1.7240e-003	1.7870e-003
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.16	0.16
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.35	0.38
tblVehicleEF	LDT2	3.0600e-003	3.1690e-003
tblVehicleEF	LDT2	6.7300e-004	6.9700e-004
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.16	0.16

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.39	0.42
tblVehicleEF	LDT2	3.9870e-003	4.4550e-003
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.92	0.99
tblVehicleEF	LDT2	2.36	2.43
tblVehicleEF	LDT2	324.76	333.68
tblVehicleEF	LDT2	68.49	70.36
tblVehicleEF	LDT2	6.3830e-003	6.9960e-003
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.28	0.30
tblVehicleEF	LDT2	1.4500e-003	1.5020e-003
tblVehicleEF	LDT2	1.8750e-003	1.9440e-003
tblVehicleEF	LDT2	1.3350e-003	1.3830e-003
tblVehicleEF	LDT2	1.7240e-003	1.7870e-003
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.16	0.17
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.31	0.33
tblVehicleEF	LDT2	3.1480e-003	3.2600e-003
tblVehicleEF	LDT2	6.6400e-004	6.8800e-004
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.16	0.17
tblVehicleEF	LDT2	0.12	0.12

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.34	0.37
tblVehicleEF	LDT2	3.6740e-003	4.1100e-003
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.85	0.92
tblVehicleEF	LDT2	3.12	3.23
tblVehicleEF	LDT2	314.16	322.73
tblVehicleEF	LDT2	69.96	71.88
tblVehicleEF	LDT2	7.0010e-003	7.6770e-003
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.08	0.10
tblVehicleEF	LDT2	0.32	0.35
tblVehicleEF	LDT2	1.4500e-003	1.5020e-003
tblVehicleEF	LDT2	1.8750e-003	1.9440e-003
tblVehicleEF	LDT2	1.3350e-003	1.3830e-003
tblVehicleEF	LDT2	1.7240e-003	1.7870e-003
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.17	0.18
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.38	0.41
tblVehicleEF	LDT2	3.0450e-003	3.1530e-003
tblVehicleEF	LDT2	6.7800e-004	7.0200e-004
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.17	0.18
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.02	0.03

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.41	0.45
tblVehicleEF	LHD1	4.3940e-003	4.4830e-003
tblVehicleEF	LHD1	8.6160e-003	9.3280e-003
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.91	0.98
tblVehicleEF	LHD1	0.97	1.00
tblVehicleEF	LHD1	9.38	9.45
tblVehicleEF	LHD1	702.79	711.82
tblVehicleEF	LHD1	10.01	10.15
tblVehicleEF	LHD1	9.1000e-004	9.1200e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	1.37	1.50
tblVehicleEF	LHD1	0.28	0.29
tblVehicleEF	LHD1	1.0320e-003	1.0280e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.4500e-004	2.5500e-004
tblVehicleEF	LHD1	9.8800e-004	9.8300e-004
tblVehicleEF	LHD1	2.5240e-003	2.5230e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	2.2500e-004	2.3400e-004
tblVehicleEF	LHD1	1.9440e-003	2.0240e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2020e-003	1.2390e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	0.25	0.25
tblVehicleEF	LHD1	0.07	0.08
tblVehicleEF	LHD1	6.8340e-003	6.9220e-003
tblVehicleEF	LHD1	9.9000e-005	1.0000e-004
tblVehicleEF	LHD1	1.9440e-003	2.0240e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.2020e-003	1.2390e-003
tblVehicleEF	LHD1	0.12	0.13
tblVehicleEF	LHD1	0.25	0.25
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	4.4060e-003	4.4950e-003
tblVehicleEF	LHD1	8.7800e-003	9.5160e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.92	1.00
tblVehicleEF	LHD1	0.91	0.94
tblVehicleEF	LHD1	9.38	9.45
tblVehicleEF	LHD1	702.82	711.85
tblVehicleEF	LHD1	9.90	10.04
tblVehicleEF	LHD1	9.1300e-004	9.1500e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	1.32	1.44
tblVehicleEF	LHD1	0.27	0.28
tblVehicleEF	LHD1	1.0320e-003	1.0280e-003
tblVehicleEF	LHD1	0.01	0.01

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.4500e-004	2.5500e-004
tblVehicleEF	LHD1	9.8800e-004	9.8300e-004
tblVehicleEF	LHD1	2.5240e-003	2.5230e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	2.2500e-004	2.3400e-004
tblVehicleEF	LHD1	3.1170e-003	3.2550e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9460e-003	2.0180e-003
tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	0.24	0.24
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	6.8340e-003	6.9220e-003
tblVehicleEF	LHD1	9.8000e-005	9.9000e-005
tblVehicleEF	LHD1	3.1170e-003	3.2550e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.9460e-003	2.0180e-003
tblVehicleEF	LHD1	0.12	0.13
tblVehicleEF	LHD1	0.24	0.24
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	4.3870e-003	4.4760e-003
tblVehicleEF	LHD1	8.5210e-003	9.2200e-003
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.90	0.97
tblVehicleEF	LHD1	1.01	1.04
tblVehicleEF	LHD1	9.38	9.45

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	702.78	711.80
tblVehicleEF	LHD1	10.07	10.22
tblVehicleEF	LHD1	9.0900e-004	9.1200e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	1.36	1.49
tblVehicleEF	LHD1	0.30	0.30
tblVehicleEF	LHD1	1.0320e-003	1.0280e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.4500e-004	2.5500e-004
tblVehicleEF	LHD1	9.8800e-004	9.8300e-004
tblVehicleEF	LHD1	2.5240e-003	2.5230e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	2.2500e-004	2.3400e-004
tblVehicleEF	LHD1	1.3340e-003	1.3850e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	8.8100e-004	9.0500e-004
tblVehicleEF	LHD1	0.10	0.10
tblVehicleEF	LHD1	0.27	0.28
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	6.8340e-003	6.9220e-003
tblVehicleEF	LHD1	1.0000e-004	1.0100e-004
tblVehicleEF	LHD1	1.3340e-003	1.3850e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	8.8100e-004	9.0500e-004

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	0.12	0.13
tblVehicleEF	LHD1	0.27	0.28
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD2	3.0110e-003	3.0890e-003
tblVehicleEF	LHD2	5.9010e-003	6.2600e-003
tblVehicleEF	LHD2	8.5190e-003	9.0470e-003
tblVehicleEF	LHD2	0.13	0.13
tblVehicleEF	LHD2	0.61	0.65
tblVehicleEF	LHD2	0.56	0.59
tblVehicleEF	LHD2	14.59	14.68
tblVehicleEF	LHD2	704.11	714.03
tblVehicleEF	LHD2	7.19	7.35
tblVehicleEF	LHD2	1.8700e-003	1.8760e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	1.33	1.45
tblVehicleEF	LHD2	0.18	0.19
tblVehicleEF	LHD2	1.4680e-003	1.4580e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.1500e-004	1.2000e-004
tblVehicleEF	LHD2	1.4050e-003	1.3940e-003
tblVehicleEF	LHD2	2.7120e-003	2.7090e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	1.1000e-004
tblVehicleEF	LHD2	9.2800e-004	9.7300e-004
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	6.2200e-004	6.3900e-004
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	1.3900e-004	1.4000e-004
tblVehicleEF	LHD2	6.7870e-003	6.8830e-003
tblVehicleEF	LHD2	7.1000e-005	7.3000e-005
tblVehicleEF	LHD2	9.2800e-004	9.7300e-004
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2200e-004	6.3900e-004
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	3.0200e-003	3.0970e-003
tblVehicleEF	LHD2	5.9520e-003	6.3180e-003
tblVehicleEF	LHD2	8.1300e-003	8.6340e-003
tblVehicleEF	LHD2	0.13	0.13
tblVehicleEF	LHD2	0.62	0.66
tblVehicleEF	LHD2	0.53	0.55
tblVehicleEF	LHD2	14.59	14.68
tblVehicleEF	LHD2	704.12	714.04
tblVehicleEF	LHD2	7.13	7.28
tblVehicleEF	LHD2	1.8710e-003	1.8770e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	1.28	1.39
tblVehicleEF	LHD2	0.17	0.18

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	1.4680e-003	1.4580e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.1500e-004	1.2000e-004
tblVehicleEF	LHD2	1.4050e-003	1.3940e-003
tblVehicleEF	LHD2	2.7120e-003	2.7090e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	1.1000e-004
tblVehicleEF	LHD2	1.4630e-003	1.5380e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0030e-003	1.0340e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	1.3900e-004	1.4000e-004
tblVehicleEF	LHD2	6.7870e-003	6.8830e-003
tblVehicleEF	LHD2	7.1000e-005	7.2000e-005
tblVehicleEF	LHD2	1.4630e-003	1.5380e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0030e-003	1.0340e-003
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	3.0060e-003	3.0840e-003
tblVehicleEF	LHD2	5.8710e-003	6.2260e-003
tblVehicleEF	LHD2	8.7600e-003	9.3040e-003
tblVehicleEF	LHD2	0.13	0.13

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	0.61	0.65
tblVehicleEF	LHD2	0.59	0.61
tblVehicleEF	LHD2	14.59	14.68
tblVehicleEF	LHD2	704.11	714.02
tblVehicleEF	LHD2	7.23	7.39
tblVehicleEF	LHD2	1.8690e-003	1.8750e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	1.32	1.44
tblVehicleEF	LHD2	0.19	0.20
tblVehicleEF	LHD2	1.4680e-003	1.4580e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.1500e-004	1.2000e-004
tblVehicleEF	LHD2	1.4050e-003	1.3940e-003
tblVehicleEF	LHD2	2.7120e-003	2.7090e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	1.1000e-004
tblVehicleEF	LHD2	6.4600e-004	6.7400e-004
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.5700e-004	4.6800e-004
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	1.3900e-004	1.4000e-004
tblVehicleEF	LHD2	6.7870e-003	6.8830e-003
tblVehicleEF	LHD2	7.2000e-005	7.3000e-005

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	6.4600e-004	6.7400e-004
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.5700e-004	4.6800e-004
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	MCY	0.33	0.33
tblVehicleEF	MCY	0.26	0.26
tblVehicleEF	MCY	19.84	20.16
tblVehicleEF	MCY	8.92	8.89
tblVehicleEF	MCY	210.33	210.21
tblVehicleEF	MCY	62.43	62.73
tblVehicleEF	MCY	0.07	0.07
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	1.17	1.18
tblVehicleEF	MCY	0.27	0.27
tblVehicleEF	MCY	1.9280e-003	1.9100e-003
tblVehicleEF	MCY	3.1490e-003	3.3460e-003
tblVehicleEF	MCY	1.8050e-003	1.7900e-003
tblVehicleEF	MCY	2.9700e-003	3.1600e-003
tblVehicleEF	MCY	0.92	0.92
tblVehicleEF	MCY	0.85	0.85
tblVehicleEF	MCY	0.57	0.57
tblVehicleEF	MCY	2.26	2.28
tblVehicleEF	MCY	0.79	0.81
tblVehicleEF	MCY	1.99	2.00
tblVehicleEF	MCY	2.0810e-003	2.0800e-003
tblVehicleEF	MCY	6.1800e-004	6.2100e-004

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MCY	0.92	0.92
tblVehicleEF	MCY	0.85	0.85
tblVehicleEF	MCY	0.57	0.57
tblVehicleEF	MCY	2.78	2.79
tblVehicleEF	MCY	0.79	0.81
tblVehicleEF	MCY	2.17	2.18
tblVehicleEF	MCY	0.32	0.32
tblVehicleEF	MCY	0.22	0.22
tblVehicleEF	MCY	18.46	18.73
tblVehicleEF	MCY	7.86	7.85
tblVehicleEF	MCY	207.82	207.61
tblVehicleEF	MCY	59.77	60.07
tblVehicleEF	MCY	0.06	0.06
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	0.25	0.25
tblVehicleEF	MCY	1.9280e-003	1.9100e-003
tblVehicleEF	MCY	3.1490e-003	3.3460e-003
tblVehicleEF	MCY	1.8050e-003	1.7900e-003
tblVehicleEF	MCY	2.9700e-003	3.1600e-003
tblVehicleEF	MCY	1.62	1.62
tblVehicleEF	MCY	0.90	0.91
tblVehicleEF	MCY	1.10	1.11
tblVehicleEF	MCY	2.17	2.18
tblVehicleEF	MCY	0.73	0.75
tblVehicleEF	MCY	1.69	1.70
tblVehicleEF	MCY	2.0570e-003	2.0550e-003
tblVehicleEF	MCY	5.9100e-004	5.9400e-004
tblVehicleEF	MCY	1.62	1.62

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MCY	0.90	0.91
tblVehicleEF	MCY	1.10	1.11
tblVehicleEF	MCY	2.66	2.67
tblVehicleEF	MCY	0.73	0.75
tblVehicleEF	MCY	1.84	1.85
tblVehicleEF	MCY	0.34	0.34
tblVehicleEF	MCY	0.28	0.28
tblVehicleEF	MCY	20.80	21.15
tblVehicleEF	MCY	9.60	9.57
tblVehicleEF	MCY	212.07	212.00
tblVehicleEF	MCY	64.14	64.44
tblVehicleEF	MCY	0.07	0.07
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	1.18	1.19
tblVehicleEF	MCY	0.28	0.28
tblVehicleEF	MCY	1.9280e-003	1.9100e-003
tblVehicleEF	MCY	3.1490e-003	3.3460e-003
tblVehicleEF	MCY	1.8050e-003	1.7900e-003
tblVehicleEF	MCY	2.9700e-003	3.1600e-003
tblVehicleEF	MCY	0.60	0.60
tblVehicleEF	MCY	1.05	1.07
tblVehicleEF	MCY	0.36	0.36
tblVehicleEF	MCY	2.32	2.34
tblVehicleEF	MCY	0.92	0.94
tblVehicleEF	MCY	2.18	2.19
tblVehicleEF	MCY	2.0990e-003	2.0980e-003
tblVehicleEF	MCY	6.3500e-004	6.3800e-004
tblVehicleEF	MCY	0.60	0.60
tblVehicleEF	MCY	1.05	1.07

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MCY	0.36	0.36
tblVehicleEF	MCY	2.85	2.86
tblVehicleEF	MCY	0.92	0.94
tblVehicleEF	MCY	2.37	2.39
tblVehicleEF	MDV	4.1230e-003	4.6570e-003
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.88	0.96
tblVehicleEF	MDV	3.21	3.40
tblVehicleEF	MDV	388.99	398.83
tblVehicleEF	MDV	84.30	86.53
tblVehicleEF	MDV	8.8130e-003	9.5820e-003
tblVehicleEF	MDV	0.03	0.04
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.35	0.38
tblVehicleEF	MDV	1.4960e-003	1.5600e-003
tblVehicleEF	MDV	1.8690e-003	1.9670e-003
tblVehicleEF	MDV	1.3810e-003	1.4400e-003
tblVehicleEF	MDV	1.7180e-003	1.8090e-003
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.41	0.45
tblVehicleEF	MDV	3.7690e-003	3.8940e-003
tblVehicleEF	MDV	8.1700e-004	8.4600e-004
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.08	0.08

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.45	0.50
tblVehicleEF	MDV	4.3840e-003	4.9430e-003
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.94	1.03
tblVehicleEF	MDV	2.66	2.81
tblVehicleEF	MDV	398.35	408.52
tblVehicleEF	MDV	83.23	85.40
tblVehicleEF	MDV	8.2250e-003	8.9290e-003
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.32	0.35
tblVehicleEF	MDV	1.4960e-003	1.5600e-003
tblVehicleEF	MDV	1.8690e-003	1.9670e-003
tblVehicleEF	MDV	1.3810e-003	1.4400e-003
tblVehicleEF	MDV	1.7180e-003	1.8090e-003
tblVehicleEF	MDV	0.12	0.13
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.13	0.14
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.36	0.40
tblVehicleEF	MDV	3.8590e-003	3.9890e-003
tblVehicleEF	MDV	8.0700e-004	8.3500e-004
tblVehicleEF	MDV	0.12	0.13
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.13	0.14
tblVehicleEF	MDV	0.03	0.03

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.40	0.43
tblVehicleEF	MDV	4.0380e-003	4.5660e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.87	0.95
tblVehicleEF	MDV	3.53	3.74
tblVehicleEF	MDV	387.41	397.20
tblVehicleEF	MDV	84.92	87.19
tblVehicleEF	MDV	8.9000e-003	9.6800e-003
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.37	0.40
tblVehicleEF	MDV	1.4960e-003	1.5600e-003
tblVehicleEF	MDV	1.8690e-003	1.9670e-003
tblVehicleEF	MDV	1.3810e-003	1.4400e-003
tblVehicleEF	MDV	1.7180e-003	1.8090e-003
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.17	0.18
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.44	0.49
tblVehicleEF	MDV	3.7530e-003	3.8780e-003
tblVehicleEF	MDV	8.2300e-004	8.5200e-004
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.17	0.18
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.09	0.09

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	0.49	0.53
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.28	1.44
tblVehicleEF	MH	2.05	2.14
tblVehicleEF	MH	1,507.51	1,527.26
tblVehicleEF	MH	18.41	18.86
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.66	1.68
tblVehicleEF	MH	0.25	0.25
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.4300e-004	2.5600e-004
tblVehicleEF	MH	3.2940e-003	3.2880e-003
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.2300e-004	2.3500e-004
tblVehicleEF	MH	0.71	0.75
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.33	0.34
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.8200e-004	1.8700e-004
tblVehicleEF	MH	0.71	0.75
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.33	0.34
tblVehicleEF	MH	0.10	0.11

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.32	1.49
tblVehicleEF	MH	1.91	1.99
tblVehicleEF	MH	1,507.57	1,527.34
tblVehicleEF	MH	18.17	18.60
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	1.57	1.60
tblVehicleEF	MH	0.23	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.4300e-004	2.5600e-004
tblVehicleEF	MH	3.2940e-003	3.2880e-003
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.2300e-004	2.3500e-004
tblVehicleEF	MH	1.10	1.17
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.52	0.55
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.09	0.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.8000e-004	1.8400e-004
tblVehicleEF	MH	1.10	1.17
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.52	0.55

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.26	1.42
tblVehicleEF	MH	2.13	2.22
tblVehicleEF	MH	1,507.46	1,527.22
tblVehicleEF	MH	18.55	19.00
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.65	1.68
tblVehicleEF	MH	0.26	0.26
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.4300e-004	2.5600e-004
tblVehicleEF	MH	3.2940e-003	3.2880e-003
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.2300e-004	2.3500e-004
tblVehicleEF	MH	0.51	0.54
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.24	0.25
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.8400e-004	1.8800e-004
tblVehicleEF	MH	0.51	0.54
tblVehicleEF	MH	0.08	0.08

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.24	0.25
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.11	0.11
tblVehicleEF	MHD	3.2810e-003	3.3490e-003
tblVehicleEF	MHD	2.0190e-003	2.3440e-003
tblVehicleEF	MHD	9.1410e-003	9.7650e-003
tblVehicleEF	MHD	0.36	0.37
tblVehicleEF	MHD	0.26	0.30
tblVehicleEF	MHD	1.08	1.17
tblVehicleEF	MHD	68.31	69.46
tblVehicleEF	MHD	1,019.09	1,034.77
tblVehicleEF	MHD	8.80	9.28
tblVehicleEF	MHD	9.8740e-003	0.01
tblVehicleEF	MHD	0.13	0.14
tblVehicleEF	MHD	6.6810e-003	6.8530e-003
tblVehicleEF	MHD	0.40	0.42
tblVehicleEF	MHD	1.44	1.45
tblVehicleEF	MHD	1.70	1.68
tblVehicleEF	MHD	3.8000e-004	4.3900e-004
tblVehicleEF	MHD	8.9210e-003	8.9900e-003
tblVehicleEF	MHD	1.0400e-004	1.1100e-004
tblVehicleEF	MHD	3.6300e-004	4.2000e-004
tblVehicleEF	MHD	8.5300e-003	8.5960e-003
tblVehicleEF	MHD	9.6000e-005	1.0200e-004
tblVehicleEF	MHD	3.7300e-004	4.1100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.4700e-004	2.6700e-004

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	6.4800e-004	6.5900e-004
tblVehicleEF	MHD	9.7110e-003	9.8620e-003
tblVehicleEF	MHD	8.7000e-005	9.2000e-005
tblVehicleEF	MHD	3.7300e-004	4.1100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.4700e-004	2.6700e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.06
tblVehicleEF	MHD	3.0880e-003	3.1480e-003
tblVehicleEF	MHD	2.0630e-003	2.3970e-003
tblVehicleEF	MHD	8.7090e-003	9.3010e-003
tblVehicleEF	MHD	0.30	0.30
tblVehicleEF	MHD	0.26	0.30
tblVehicleEF	MHD	1.01	1.10
tblVehicleEF	MHD	68.45	69.70
tblVehicleEF	MHD	1,019.09	1,034.78
tblVehicleEF	MHD	8.68	9.15
tblVehicleEF	MHD	9.8530e-003	0.01
tblVehicleEF	MHD	0.13	0.14
tblVehicleEF	MHD	6.4510e-003	6.6180e-003
tblVehicleEF	MHD	0.40	0.42
tblVehicleEF	MHD	1.38	1.39
tblVehicleEF	MHD	1.70	1.68
tblVehicleEF	MHD	3.2300e-004	3.7300e-004

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	8.9210e-003	8.9900e-003
tblVehicleEF	MHD	1.0400e-004	1.1100e-004
tblVehicleEF	MHD	3.0900e-004	3.5700e-004
tblVehicleEF	MHD	8.5300e-003	8.5960e-003
tblVehicleEF	MHD	9.6000e-005	1.0200e-004
tblVehicleEF	MHD	5.9900e-004	6.6300e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.0600e-004	4.4100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	6.4900e-004	6.6100e-004
tblVehicleEF	MHD	9.7120e-003	9.8620e-003
tblVehicleEF	MHD	8.6000e-005	9.1000e-005
tblVehicleEF	MHD	5.9900e-004	6.6300e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.0600e-004	4.4100e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.06
tblVehicleEF	MHD	3.4680e-003	3.5400e-003
tblVehicleEF	MHD	1.9930e-003	2.3130e-003
tblVehicleEF	MHD	9.4030e-003	0.01
tblVehicleEF	MHD	0.42	0.43
tblVehicleEF	MHD	0.25	0.29
tblVehicleEF	MHD	1.13	1.23
tblVehicleEF	MHD	68.25	69.27

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	1,019.08	1,034.76
tblVehicleEF	MHD	8.88	9.37
tblVehicleEF	MHD	9.9080e-003	0.01
tblVehicleEF	MHD	0.13	0.14
tblVehicleEF	MHD	6.8910e-003	7.0690e-003
tblVehicleEF	MHD	0.41	0.43
tblVehicleEF	MHD	1.42	1.44
tblVehicleEF	MHD	1.70	1.69
tblVehicleEF	MHD	4.5800e-004	5.3000e-004
tblVehicleEF	MHD	8.9210e-003	8.9900e-003
tblVehicleEF	MHD	1.0400e-004	1.1100e-004
tblVehicleEF	MHD	4.3800e-004	5.0700e-004
tblVehicleEF	MHD	8.5300e-003	8.5960e-003
tblVehicleEF	MHD	9.6000e-005	1.0200e-004
tblVehicleEF	MHD	2.5600e-004	2.8100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.8000e-004	1.9300e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	6.4700e-004	6.5700e-004
tblVehicleEF	MHD	9.7110e-003	9.8620e-003
tblVehicleEF	MHD	8.8000e-005	9.3000e-005
tblVehicleEF	MHD	2.5600e-004	2.8100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.8000e-004	1.9300e-004
tblVehicleEF	MHD	0.02	0.03

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	OBUS	7.9900e-003	8.0370e-003
tblVehicleEF	OBUS	7.5690e-003	8.7220e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.50	0.49
tblVehicleEF	OBUS	0.89	1.03
tblVehicleEF	OBUS	2.72	2.81
tblVehicleEF	OBUS	70.02	68.39
tblVehicleEF	OBUS	1,394.70	1,421.03
tblVehicleEF	OBUS	20.09	20.60
tblVehicleEF	OBUS	8.9990e-003	8.6950e-003
tblVehicleEF	OBUS	0.11	0.11
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.26	0.25
tblVehicleEF	OBUS	1.26	1.25
tblVehicleEF	OBUS	0.82	0.80
tblVehicleEF	OBUS	8.5000e-005	8.1000e-005
tblVehicleEF	OBUS	6.9550e-003	6.6020e-003
tblVehicleEF	OBUS	2.0400e-004	2.0900e-004
tblVehicleEF	OBUS	8.1000e-005	7.8000e-005
tblVehicleEF	OBUS	6.6370e-003	6.2990e-003
tblVehicleEF	OBUS	1.8800e-004	1.9200e-004
tblVehicleEF	OBUS	1.6770e-003	1.7310e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	9.0800e-004	9.2500e-004
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.09	0.09

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	6.6800e-004	6.5300e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.9900e-004	2.0400e-004
tblVehicleEF	OBUS	1.6770e-003	1.7310e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	9.0800e-004	9.2500e-004
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.14	0.14
tblVehicleEF	OBUS	8.0580e-003	8.1030e-003
tblVehicleEF	OBUS	7.7810e-003	8.9710e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.50	0.49
tblVehicleEF	OBUS	0.92	1.05
tblVehicleEF	OBUS	2.53	2.62
tblVehicleEF	OBUS	69.26	67.66
tblVehicleEF	OBUS	1,394.74	1,421.08
tblVehicleEF	OBUS	19.77	20.27
tblVehicleEF	OBUS	8.8840e-003	8.5840e-003
tblVehicleEF	OBUS	0.11	0.11
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.25	0.24
tblVehicleEF	OBUS	1.20	1.18
tblVehicleEF	OBUS	0.80	0.78
tblVehicleEF	OBUS	7.5000e-005	7.2000e-005
tblVehicleEF	OBUS	6.9550e-003	6.6020e-003
tblVehicleEF	OBUS	2.0400e-004	2.0900e-004

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	7.2000e-005	6.9000e-005
tblVehicleEF	OBUS	6.6370e-003	6.2990e-003
tblVehicleEF	OBUS	1.8800e-004	1.9200e-004
tblVehicleEF	OBUS	2.6160e-003	2.7120e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	1.4530e-003	1.4870e-003
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	6.6100e-004	6.4600e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.9600e-004	2.0100e-004
tblVehicleEF	OBUS	2.6160e-003	2.7120e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	1.4530e-003	1.4870e-003
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.13	0.14
tblVehicleEF	OBUS	7.9130e-003	7.9630e-003
tblVehicleEF	OBUS	7.4480e-003	8.5800e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.50	0.49
tblVehicleEF	OBUS	0.88	1.01
tblVehicleEF	OBUS	2.82	2.92
tblVehicleEF	OBUS	71.07	69.41
tblVehicleEF	OBUS	1,394.67	1,421.00
tblVehicleEF	OBUS	20.27	20.78

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	9.1630e-003	8.8530e-003
tblVehicleEF	OBUS	0.11	0.11
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.28	0.27
tblVehicleEF	OBUS	1.25	1.24
tblVehicleEF	OBUS	0.83	0.81
tblVehicleEF	OBUS	9.8000e-005	9.4000e-005
tblVehicleEF	OBUS	6.9550e-003	6.6020e-003
tblVehicleEF	OBUS	2.0400e-004	2.0900e-004
tblVehicleEF	OBUS	9.4000e-005	9.0000e-005
tblVehicleEF	OBUS	6.6370e-003	6.2990e-003
tblVehicleEF	OBUS	1.8800e-004	1.9200e-004
tblVehicleEF	OBUS	1.2110e-003	1.2440e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	6.7500e-004	6.8600e-004
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	6.7800e-004	6.6200e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	2.0100e-004	2.0600e-004
tblVehicleEF	OBUS	1.2110e-003	1.2440e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	6.7500e-004	6.8600e-004
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.14	0.15

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	0.06	0.06
tblVehicleEF	SBUS	8.7580e-003	9.6490e-003
tblVehicleEF	SBUS	6.3970e-003	6.4810e-003
tblVehicleEF	SBUS	2.28	2.26
tblVehicleEF	SBUS	0.79	0.87
tblVehicleEF	SBUS	0.89	0.93
tblVehicleEF	SBUS	358.06	359.37
tblVehicleEF	SBUS	1,074.49	1,081.95
tblVehicleEF	SBUS	4.74	4.81
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	5.1790e-003	5.0570e-003
tblVehicleEF	SBUS	3.89	3.96
tblVehicleEF	SBUS	4.78	4.94
tblVehicleEF	SBUS	0.65	0.61
tblVehicleEF	SBUS	3.9690e-003	4.2250e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.2000e-005	3.3000e-005
tblVehicleEF	SBUS	3.7970e-003	4.0430e-003
tblVehicleEF	SBUS	2.6630e-003	2.6610e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	2.9000e-005	3.0000e-005
tblVehicleEF	SBUS	1.0280e-003	1.0980e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.26	0.26
tblVehicleEF	SBUS	5.4200e-004	5.5100e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.02

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4100e-003	3.4220e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.7000e-005	4.8000e-005
tblVehicleEF	SBUS	1.0280e-003	1.0980e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.38	0.37
tblVehicleEF	SBUS	5.4200e-004	5.5100e-004
tblVehicleEF	SBUS	0.12	0.13
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.06	0.06
tblVehicleEF	SBUS	8.9030e-003	9.8160e-003
tblVehicleEF	SBUS	5.6780e-003	5.7510e-003
tblVehicleEF	SBUS	2.24	2.22
tblVehicleEF	SBUS	0.80	0.89
tblVehicleEF	SBUS	0.72	0.75
tblVehicleEF	SBUS	369.44	371.14
tblVehicleEF	SBUS	1,074.52	1,081.98
tblVehicleEF	SBUS	4.45	4.51
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	5.0060e-003	4.8880e-003
tblVehicleEF	SBUS	4.00	4.07
tblVehicleEF	SBUS	4.59	4.74
tblVehicleEF	SBUS	0.65	0.61
tblVehicleEF	SBUS	3.3520e-003	3.5680e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	3.2000e-005	3.3000e-005
tblVehicleEF	SBUS	3.2070e-003	3.4140e-003
tblVehicleEF	SBUS	2.6630e-003	2.6610e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	2.9000e-005	3.0000e-005
tblVehicleEF	SBUS	1.5850e-003	1.7070e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.26	0.26
tblVehicleEF	SBUS	8.2800e-004	8.5000e-004
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.5180e-003	3.5340e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.4000e-005	4.5000e-005
tblVehicleEF	SBUS	1.5850e-003	1.7070e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.38	0.37
tblVehicleEF	SBUS	8.2800e-004	8.5000e-004
tblVehicleEF	SBUS	0.12	0.13
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.06	0.06
tblVehicleEF	SBUS	8.6810e-003	9.5600e-003
tblVehicleEF	SBUS	6.7490e-003	6.8370e-003
tblVehicleEF	SBUS	2.34	2.31
tblVehicleEF	SBUS	0.78	0.86
tblVehicleEF	SBUS	0.98	1.02
tblVehicleEF	SBUS	342.35	343.13

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	1,074.48	1,081.93
tblVehicleEF	SBUS	4.88	4.95
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	5.3330e-003	5.2070e-003
tblVehicleEF	SBUS	3.75	3.81
tblVehicleEF	SBUS	4.73	4.89
tblVehicleEF	SBUS	0.66	0.62
tblVehicleEF	SBUS	4.8210e-003	5.1330e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.2000e-005	3.3000e-005
tblVehicleEF	SBUS	4.6120e-003	4.9110e-003
tblVehicleEF	SBUS	2.6630e-003	2.6610e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	2.9000e-005	3.0000e-005
tblVehicleEF	SBUS	7.5500e-004	8.0400e-004
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.26	0.26
tblVehicleEF	SBUS	4.1300e-004	4.1900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.2620e-003	3.2690e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.8000e-005	4.9000e-005
tblVehicleEF	SBUS	7.5500e-004	8.0400e-004
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.38	0.38

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	4.1300e-004	4.1900e-004
tblVehicleEF	SBUS	0.12	0.13
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	UBUS	1.69	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	12.85	12.68
tblVehicleEF	UBUS	1.35	1.35
tblVehicleEF	UBUS	1,572.92	1,581.14
tblVehicleEF	UBUS	15.19	15.29
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.50	0.57
tblVehicleEF	UBUS	0.15	0.15
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5100e-003	4.4900e-003
tblVehicleEF	UBUS	1.4900e-004	1.4500e-004
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	6.2400e-003	6.2410e-003
tblVehicleEF	UBUS	4.3010e-003	4.2820e-003
tblVehicleEF	UBUS	1.3700e-004	1.3300e-004
tblVehicleEF	UBUS	6.8000e-004	6.2100e-004
tblVehicleEF	UBUS	9.7270e-003	8.5820e-003
tblVehicleEF	UBUS	5.3300e-004	4.7800e-004
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	2.4830e-003	2.1230e-003
tblVehicleEF	UBUS	0.08	0.07
tblVehicleEF	UBUS	9.5600e-003	9.7130e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	1.5000e-004	1.5100e-004
tblVehicleEF	UBUS	6.8000e-004	6.2100e-004
tblVehicleEF	UBUS	9.7270e-003	8.5820e-003
tblVehicleEF	UBUS	5.3300e-004	4.7800e-004
tblVehicleEF	UBUS	1.74	1.71
tblVehicleEF	UBUS	2.4830e-003	2.1230e-003
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	1.69	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	12.85	12.68
tblVehicleEF	UBUS	1.15	1.16
tblVehicleEF	UBUS	1,572.93	1,581.15
tblVehicleEF	UBUS	14.86	14.96
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.50	0.56
tblVehicleEF	UBUS	0.14	0.14
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5100e-003	4.4900e-003
tblVehicleEF	UBUS	1.4900e-004	1.4500e-004
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	6.2400e-003	6.2410e-003
tblVehicleEF	UBUS	4.3010e-003	4.2820e-003
tblVehicleEF	UBUS	1.3700e-004	1.3300e-004
tblVehicleEF	UBUS	1.0570e-003	9.7200e-004
tblVehicleEF	UBUS	0.01	8.9120e-003
tblVehicleEF	UBUS	8.9500e-004	8.0700e-004
tblVehicleEF	UBUS	0.03	0.03

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	2.2050e-003	1.8900e-003
tblVehicleEF	UBUS	0.07	0.07
tblVehicleEF	UBUS	9.5600e-003	9.7130e-003
tblVehicleEF	UBUS	1.4700e-004	1.4800e-004
tblVehicleEF	UBUS	1.0570e-003	9.7200e-004
tblVehicleEF	UBUS	0.01	8.9120e-003
tblVehicleEF	UBUS	8.9500e-004	8.0700e-004
tblVehicleEF	UBUS	1.74	1.71
tblVehicleEF	UBUS	2.2050e-003	1.8900e-003
tblVehicleEF	UBUS	0.08	0.07
tblVehicleEF	UBUS	1.69	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	12.85	12.68
tblVehicleEF	UBUS	1.46	1.47
tblVehicleEF	UBUS	1,572.92	1,581.14
tblVehicleEF	UBUS	15.39	15.49
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.50	0.57
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5100e-003	4.4900e-003
tblVehicleEF	UBUS	1.4900e-004	1.4500e-004
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	6.2400e-003	6.2410e-003
tblVehicleEF	UBUS	4.3010e-003	4.2820e-003
tblVehicleEF	UBUS	1.3700e-004	1.3300e-004
tblVehicleEF	UBUS	4.9100e-004	4.4600e-004

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	0.01	9.1860e-003
tblVehicleEF	UBUS	3.8400e-004	3.4300e-004
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	3.0840e-003	2.6240e-003
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	9.5600e-003	9.7130e-003
tblVehicleEF	UBUS	1.5200e-004	1.5300e-004
tblVehicleEF	UBUS	4.9100e-004	4.4600e-004
tblVehicleEF	UBUS	0.01	9.1860e-003
tblVehicleEF	UBUS	3.8400e-004	3.4300e-004
tblVehicleEF	UBUS	1.74	1.71
tblVehicleEF	UBUS	3.0840e-003	2.6240e-003
tblVehicleEF	UBUS	0.09	0.09

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.6314	7.0748	5.5547	0.0125	0.6124	0.2562	0.8686	0.0790	0.2357	0.3148	0.0000	1,211.2354	1,211.2354	0.3719	2.1100e-003	1,221.1635
Maximum	**0.6314**	**7.0748**	**5.5547**	**0.0125**	**0.6124**	**0.2562**	**0.8686**	**0.0790**	**0.2357**	**0.3148**	**0.0000**	**1,211.2354**	**1,211.2354**	**0.3719**	**2.1100e-003**	**1,221.1635**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.6314	7.0748	5.5547	0.0125	0.3208	0.2562	0.5770	0.0476	0.2357	0.2833	0.0000	1,211.2354	1,211.2354	0.3719	2.1100e-003	1,221.1635
Maximum	**0.6314**	**7.0748**	**5.5547**	**0.0125**	**0.3208**	**0.2562**	**0.5770**	**0.0476**	**0.2357**	**0.2833**	**0.0000**	**1,211.2354**	**1,211.2354**	**0.3719**	**2.1100e-003**	**1,221.1635**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**47.62**	**0.00**	**33.57**	**39.84**	**0.00**	**10.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3000e-004	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.3000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0000**	**1.0000e-004**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3000e-004	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.3000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0000**	**1.0000e-004**

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/4/2023	9/4/2023	5	1	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.01

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Skid Steer Loaders	1	8.00	65	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5999	7.0534	5.3093	0.0118		0.2558	0.2558		0.2354	0.2354		1,142.9179	1,142.9179	0.3696		1,152.1590
Total	**0.5999**	**7.0534**	**5.3093**	**0.0118**	**0.5303**	**0.2558**	**0.7861**	**0.0573**	**0.2354**	**0.2926**		**1,142.9179**	**1,142.9179**	**0.3696**		**1,152.1590**

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0315	0.0214	0.2453	6.7000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		68.3175	68.3175	2.2700e-003	2.1100e-003	69.0046
Total	**0.0315**	**0.0214**	**0.2453**	**6.7000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**68.3175**	**68.3175**	**2.2700e-003**	**2.1100e-003**	**69.0046**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	0.5999	7.0534	5.3093	0.0118		0.2558	0.2558		0.2354	0.2354	0.0000	1,142.9179	1,142.9179	0.3696		1,152.1590
Total	**0.5999**	**7.0534**	**5.3093**	**0.0118**	**0.2386**	**0.2558**	**0.4944**	**0.0258**	**0.2354**	**0.2611**	**0.0000**	**1,142.9179**	**1,142.9179**	**0.3696**		**1,152.1590**

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0315	0.0214	0.2453	6.7000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		68.3175	68.3175	2.2700e-003	2.1100e-003	69.0046
Total	**0.0315**	**0.0214**	**0.2453**	**6.7000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**68.3175**	**68.3175**	**2.2700e-003**	**2.1100e-003**	**69.0046**

VTA-SB Counties Intertie Project - Temporary Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.513608	0.056184	0.190534	0.143608	0.031407	0.007983	0.010518	0.006055	0.000837	0.000446	0.030807	0.001563	0.006450

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3000e-004	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004
Unmitigated	2.3000e-004	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.0000e-005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004
Total	**2.3000e-004**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**9.0000e-005**	**9.0000e-005**	**0.0000**		**1.0000e-004**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.0000e-005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004
Total	**2.3000e-004**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**9.0000e-005**	**9.0000e-005**	**0.0000**		**1.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Booster Pump Station A

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	2.00	1000sqft	0.59	2,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on information provided by the applicant. Area of disturbance is approximatley 25,800 square feet. 2,000 sf concrete building

Construction Phase - Adjusted construction schedule to meet applicant provided schedule.

Off-road Equipment - Default construction equipment was used.

Off-road Equipment - Based on project details, added Off-highway trucks to default construction equipment list

Off-road Equipment - Based on project details, added excavator to default construction equipment list.

Off-road Equipment - Default construction equipment was used.

Off-road Equipment - Default construction equipment was used

Trips and VMT - Information provided by the applicant

Grading -

Architectural Coating - Based on VCAPCD Rule 74.2 - Architectural Coatings

Vehicle Trips - 50 maintainence trips per year. Assumed all primary C-C trips.

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Based on VCAPCD Rule 74.2 Architectural Coating

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on VCAPCD Rule 55

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	100.00	306.00
tblConstructionPhase	NumDays	2.00	6.00
tblConstructionPhase	NumDays	1.00	3.00
tblLandUse	LotAcreage	0.05	0.59
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	1.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblVehicleTrips	CC_TTP	28.00	100.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.99	0.00
tblVehicleTrips	SU_TR	5.00	0.00
tblVehicleTrips	WD_TR	4.96	0.10

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0478	0.4152	0.4309	1.0300e-003	0.0219	0.0185	0.0404	9.1700e-003	0.0170	0.0262	0.0000	90.3776	90.3776	0.0280	1.1000e-004	91.1108
2024	0.1376	1.0983	1.2577	3.0200e-003	0.0151	0.0475	0.0626	4.0200e-003	0.0437	0.0477	0.0000	265.3453	265.3453	0.0822	2.9000e-004	267.4862
Maximum	**0.1376**	**1.0983**	**1.2577**	**3.0200e-003**	**0.0219**	**0.0475**	**0.0626**	**9.1700e-003**	**0.0437**	**0.0477**	**0.0000**	**265.3453**	**265.3453**	**0.0822**	**2.9000e-004**	**267.4862**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0478	0.4152	0.4309	1.0300e-003	0.0127	0.0185	0.0312	4.8800e-003	0.0170	0.0219	0.0000	90.3775	90.3775	0.0280	1.1000e-004	91.1107
2024	0.1376	1.0983	1.2577	3.0200e-003	0.0151	0.0475	0.0626	4.0200e-003	0.0437	0.0477	0.0000	265.3449	265.3449	0.0822	2.9000e-004	267.4859
Maximum	**0.1376**	**1.0983**	**1.2577**	**3.0200e-003**	**0.0151**	**0.0475**	**0.0626**	**4.8800e-003**	**0.0437**	**0.0477**	**0.0000**	**265.3449**	**265.3449**	**0.0822**	**2.9000e-004**	**267.4859**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**24.87**	**0.00**	**8.93**	**32.52**	**0.00**	**5.81**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-6-2023**	**12-5-2023**	0.3560	0.3560
2	**12-6-2023**	**3-5-2024**	0.3468	0.3468
3	**3-6-2024**	**6-5-2024**	0.3435	0.3435
4	**6-6-2024**	**9-5-2024**	0.3434	0.3434
5	**9-6-2024**	**9-30-2024**	0.0933	0.0933
		Highest	0.3560	0.3560

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.2800e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Energy	2.2000e-004	2.0400e-003	1.7100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	5.1490	5.1490	2.9000e-004	7.0000e-005	5.1773
Mobile	7.0000e-005	9.0000e-005	6.3000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1141	0.1141	1.0000e-005	1.0000e-005	0.1160
Waste						0.0000	0.0000		0.0000	0.0000	0.5034	0.0000	0.5034	0.0298	0.0000	1.2472
Water						0.0000	0.0000		0.0000	0.0000	0.1467	0.4438	0.5906	0.0151	3.6000e-004	1.0757
Total	**8.5700e-003**	**2.1300e-003**	**2.3600e-003**	**1.0000e-005**	**1.3000e-004**	**1.5000e-004**	**2.8000e-004**	**3.0000e-005**	**1.5000e-004**	**1.9000e-004**	**0.6502**	**5.7069**	**6.3571**	**0.0452**	**4.4000e-004**	**7.6162**

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.2800e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Energy	2.2000e-004	2.0400e-003	1.7100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	5.1490	5.1490	2.9000e-004	7.0000e-005	5.1773
Mobile	7.0000e-005	9.0000e-005	6.3000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1141	0.1141	1.0000e-005	1.0000e-005	0.1160
Waste						0.0000	0.0000		0.0000	0.0000	0.5034	0.0000	0.5034	0.0298	0.0000	1.2472
Water						0.0000	0.0000		0.0000	0.0000	0.1467	0.4438	0.5906	0.0151	3.6000e-004	1.0757
Total	**8.5700e-003**	**2.1300e-003**	**2.3600e-003**	**1.0000e-005**	**1.3000e-004**	**1.5000e-004**	**2.8000e-004**	**3.0000e-005**	**1.5000e-004**	**1.9000e-004**	**0.6502**	**5.7069**	**6.3571**	**0.0452**	**4.4000e-004**	**7.6162**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/6/2023	9/8/2023	5	3	
2	Grading	Grading	9/11/2023	9/18/2023	5	6	
3	Building Construction	Building Construction	9/19/2023	11/19/2024	5	306	

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4	Architectural Coating	Architectural Coating	11/19/2024	11/25/2024	5	5	
5	Paving	Paving	11/20/2024	11/26/2024	5	5	

Acres of Grading (Site Preparation Phase): 1.5

Acres of Grading (Grading Phase): 4.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 3,000; Non-Residential Outdoor: 1,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.0000e-004	0.0000	8.0000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-004	9.2800e-003	5.8900e-003	1.0000e-005		3.4000e-004	3.4000e-004		3.1000e-004	3.1000e-004	0.0000	1.2824	1.2824	4.1000e-004	0.0000	1.2928
Total	**8.0000e-004**	**9.2800e-003**	**5.8900e-003**	**1.0000e-005**	**8.0000e-004**	**3.4000e-004**	**1.1400e-003**	**9.0000e-005**	**3.1000e-004**	**4.0000e-004**	**0.0000**	**1.2824**	**1.2824**	**4.1000e-004**	**0.0000**	**1.2928**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.2000e-004	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1439	0.1439	0.0000	0.0000	0.1452
Total	**6.0000e-005**	**4.0000e-005**	**5.2000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1439**	**0.1439**	**0.0000**	**0.0000**	**0.1452**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.6000e-004	0.0000	3.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-004	9.2800e-003	5.8900e-003	1.0000e-005		3.4000e-004	3.4000e-004		3.1000e-004	3.1000e-004	0.0000	1.2824	1.2824	4.1000e-004	0.0000	1.2928
Total	**8.0000e-004**	**9.2800e-003**	**5.8900e-003**	**1.0000e-005**	**3.6000e-004**	**3.4000e-004**	**7.0000e-004**	**4.0000e-005**	**3.1000e-004**	**3.5000e-004**	**0.0000**	**1.2824**	**1.2824**	**4.1000e-004**	**0.0000**	**1.2928**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.2000e-004	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1439	0.1439	0.0000	0.0000	0.1452
Total	**6.0000e-005**	**4.0000e-005**	**5.2000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1439**	**0.1439**	**0.0000**	**0.0000**	**0.1452**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0159	0.0000	0.0159	7.7100e-003	0.0000	7.7100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3700e-003	0.0352	0.0264	6.0000e-005		1.4900e-003	1.4900e-003		1.3700e-003	1.3700e-003	0.0000	5.0754	5.0754	1.6400e-003	0.0000	5.1164
Total	**3.3700e-003**	**0.0352**	**0.0264**	**6.0000e-005**	**0.0159**	**1.4900e-003**	**0.0174**	**7.7100e-003**	**1.3700e-003**	**9.0800e-003**	**0.0000**	**5.0754**	**5.0754**	**1.6400e-003**	**0.0000**	**5.1164**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	9.0000e-005	1.0400e-003	0.0000	3.7000e-004	0.0000	3.8000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2879	0.2879	1.0000e-005	1.0000e-005	0.2904
Total	**1.1000e-004**	**9.0000e-005**	**1.0400e-003**	**0.0000**	**3.7000e-004**	**0.0000**	**3.8000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2879**	**0.2879**	**1.0000e-005**	**1.0000e-005**	**0.2904**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.1700e-003	0.0000	7.1700e-003	3.4700e-003	0.0000	3.4700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3700e-003	0.0352	0.0264	6.0000e-005		1.4900e-003	1.4900e-003		1.3700e-003	1.3700e-003	0.0000	5.0754	5.0754	1.6400e-003	0.0000	5.1164
Total	**3.3700e-003**	**0.0352**	**0.0264**	**6.0000e-005**	**7.1700e-003**	**1.4900e-003**	**8.6600e-003**	**3.4700e-003**	**1.3700e-003**	**4.8400e-003**	**0.0000**	**5.0754**	**5.0754**	**1.6400e-003**	**0.0000**	**5.1164**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	9.0000e-005	1.0400e-003	0.0000	3.7000e-004	0.0000	3.8000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2879	0.2879	1.0000e-005	1.0000e-005	0.2904
Total	**1.1000e-004**	**9.0000e-005**	**1.0400e-003**	**0.0000**	**3.7000e-004**	**0.0000**	**3.8000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2879**	**0.2879**	**1.0000e-005**	**1.0000e-005**	**0.2904**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0420	0.3695	0.3843	9.1000e-004		0.0166	0.0166		0.0153	0.0153	0.0000	80.0377	80.0377	0.0259	0.0000	80.6848
Total	**0.0420**	**0.3695**	**0.3843**	**9.1000e-004**		**0.0166**	**0.0166**		**0.0153**	**0.0153**	**0.0000**	**80.0377**	**80.0377**	**0.0259**	**0.0000**	**80.6848**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4100e-003	1.0800e-003	0.0128	4.0000e-005	4.6200e-003	2.0000e-005	4.6500e-003	1.2300e-003	2.0000e-005	1.2500e-003	0.0000	3.5504	3.5504	9.0000e-005	1.0000e-004	3.5812
Total	**1.4100e-003**	**1.0800e-003**	**0.0128**	**4.0000e-005**	**4.6200e-003**	**2.0000e-005**	**4.6500e-003**	**1.2300e-003**	**2.0000e-005**	**1.2500e-003**	**0.0000**	**3.5504**	**3.5504**	**9.0000e-005**	**1.0000e-004**	**3.5812**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0420	0.3695	0.3843	9.1000e-004		0.0166	0.0166		0.0153	0.0153	0.0000	80.0376	80.0376	0.0259	0.0000	80.6847
Total	**0.0420**	**0.3695**	**0.3843**	**9.1000e-004**		**0.0166**	**0.0166**		**0.0153**	**0.0153**	**0.0000**	**80.0376**	**80.0376**	**0.0259**	**0.0000**	**80.6847**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4100e-003	1.0800e-003	0.0128	4.0000e-005	4.6200e-003	2.0000e-005	4.6500e-003	1.2300e-003	2.0000e-005	1.2500e-003	0.0000	3.5504	3.5504	9.0000e-005	1.0000e-004	3.5812
Total	**1.4100e-003**	**1.0800e-003**	**0.0128**	**4.0000e-005**	**4.6200e-003**	**2.0000e-005**	**4.6500e-003**	**1.2300e-003**	**2.0000e-005**	**1.2500e-003**	**0.0000**	**3.5504**	**3.5504**	**9.0000e-005**	**1.0000e-004**	**3.5812**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1267	1.0790	1.1969	2.8600e-003		0.0467	0.0467		0.0429	0.0429	0.0000	251.0169	251.0169	0.0812	0.0000	253.0465
Total	**0.1267**	**1.0790**	**1.1969**	**2.8600e-003**		**0.0467**	**0.0467**		**0.0429**	**0.0429**	**0.0000**	**251.0169**	**251.0169**	**0.0812**	**0.0000**	**253.0465**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1500e-003	3.0200e-003	0.0372	1.2000e-004	0.0145	7.0000e-005	0.0146	3.8500e-003	6.0000e-005	3.9100e-003	0.0000	10.8713	10.8713	2.5000e-004	2.8000e-004	10.9608
Total	**4.1500e-003**	**3.0200e-003**	**0.0372**	**1.2000e-004**	**0.0145**	**7.0000e-005**	**0.0146**	**3.8500e-003**	**6.0000e-005**	**3.9100e-003**	**0.0000**	**10.8713**	**10.8713**	**2.5000e-004**	**2.8000e-004**	**10.9608**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1267	1.0790	1.1969	2.8600e-003		0.0467	0.0467		0.0429	0.0429	0.0000	251.0166	251.0166	0.0812	0.0000	253.0462
Total	**0.1267**	**1.0790**	**1.1969**	**2.8600e-003**		**0.0467**	**0.0467**		**0.0429**	**0.0429**	**0.0000**	**251.0166**	**251.0166**	**0.0812**	**0.0000**	**253.0462**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1500e-003	3.0200e-003	0.0372	1.2000e-004	0.0145	7.0000e-005	0.0146	3.8500e-003	6.0000e-005	3.9100e-003	0.0000	10.8713	10.8713	2.5000e-004	2.8000e-004	10.9608
Total	**4.1500e-003**	**3.0200e-003**	**0.0372**	**1.2000e-004**	**0.0145**	**7.0000e-005**	**0.0146**	**3.8500e-003**	**6.0000e-005**	**3.9100e-003**	**0.0000**	**10.8713**	**10.8713**	**2.5000e-004**	**2.8000e-004**	**10.9608**

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.6300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-004	3.0500e-003	4.5300e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6392
Total	**5.0800e-003**	**3.0500e-003**	**4.5300e-003**	**1.0000e-005**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6392**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	7.0000e-005	8.0000e-004	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2343	0.2343	1.0000e-005	1.0000e-005	0.2362
Total	**9.0000e-005**	**7.0000e-005**	**8.0000e-004**	**0.0000**	**3.1000e-004**	**0.0000**	**3.1000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2343**	**0.2343**	**1.0000e-005**	**1.0000e-005**	**0.2362**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.6300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-004	3.0500e-003	4.5300e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6392
Total	**5.0800e-003**	**3.0500e-003**	**4.5300e-003**	**1.0000e-005**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6392**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	7.0000e-005	8.0000e-004	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2343	0.2343	1.0000e-005	1.0000e-005	0.2362
Total	**9.0000e-005**	**7.0000e-005**	**8.0000e-004**	**0.0000**	**3.1000e-004**	**0.0000**	**3.1000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2343**	**0.2343**	**1.0000e-005**	**1.0000e-005**	**0.2362**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4800e-003	0.0131	0.0176	3.0000e-005		6.1000e-004	6.1000e-004		5.7000e-004	5.7000e-004	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.4800e-003**	**0.0131**	**0.0176**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**5.7000e-004**	**5.7000e-004**	**0.0000**	**2.3502**	**2.3502**	**6.8000e-004**	**0.0000**	**2.3673**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	7.0000e-005	8.0000e-004	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2343	0.2343	1.0000e-005	1.0000e-005	0.2362
Total	**9.0000e-005**	**7.0000e-005**	**8.0000e-004**	**0.0000**	**3.1000e-004**	**0.0000**	**3.1000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2343**	**0.2343**	**1.0000e-005**	**1.0000e-005**	**0.2362**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4800e-003	0.0131	0.0176	3.0000e-005		6.1000e-004	6.1000e-004		5.7000e-004	5.7000e-004	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.4800e-003**	**0.0131**	**0.0176**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**5.7000e-004**	**5.7000e-004**	**0.0000**	**2.3502**	**2.3502**	**6.8000e-004**	**0.0000**	**2.3673**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	7.0000e-005	8.0000e-004	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2343	0.2343	1.0000e-005	1.0000e-005	0.2362
Total	**9.0000e-005**	**7.0000e-005**	**8.0000e-004**	**0.0000**	**3.1000e-004**	**0.0000**	**3.1000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2343**	**0.2343**	**1.0000e-005**	**1.0000e-005**	**0.2362**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	7.0000e-005	9.0000e-005	6.3000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1141	0.1141	1.0000e-005	1.0000e-005	0.1160
Unmitigated	7.0000e-005	9.0000e-005	6.3000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1141	0.1141	1.0000e-005	1.0000e-005	0.1160

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.20	0.00	0.00	343	343
Total	0.20	0.00	0.00	343	343

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.518500	0.056626	0.189643	0.140762	0.030399	0.007841	0.010730	0.006132	0.000824	0.000442	0.030440	0.001544	0.006118

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2.9333	2.9333	2.5000e-004	3.0000e-005	2.9484
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2.9333	2.9333	2.5000e-004	3.0000e-005	2.9484
NaturalGas Mitigated	2.2000e-004	2.0400e-003	1.7100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	2.2157	2.2157	4.0000e-005	4.0000e-005	2.2288
NaturalGas Unmitigated	2.2000e-004	2.0400e-003	1.7100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	2.2157	2.2157	4.0000e-005	4.0000e-005	2.2288

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	41520	2.2000e-004	2.0400e-003	1.7100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	2.2157	2.2157	4.0000e-005	4.0000e-005	2.2288
Total		**2.2000e-004**	**2.0400e-003**	**1.7100e-003**	**1.0000e-005**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**2.2157**	**2.2157**	**4.0000e-005**	**4.0000e-005**	**2.2288**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	41520	2.2000e-004	2.0400e-003	1.7100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	2.2157	2.2157	4.0000e-005	4.0000e-005	2.2288
Total		**2.2000e-004**	**2.0400e-003**	**1.7100e-003**	**1.0000e-005**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**2.2157**	**2.2157**	**4.0000e-005**	**4.0000e-005**	**2.2288**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	16540	2.9333	2.5000e-004	3.0000e-005	2.9484
Total		**2.9333**	**2.5000e-004**	**3.0000e-005**	**2.9484**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	16540	2.9333	2.5000e-004	3.0000e-005	2.9484
Total		**2.9333**	**2.5000e-004**	**3.0000e-005**	**2.9484**

6.0 Area Detail

6.1 Mitigation Measures Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	8.2800e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Unmitigated	8.2800e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Total	**8.2700e-003**	**0.0000**	**2.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Total	**8.2700e-003**	**0.0000**	**2.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.5906	0.0151	3.6000e-004	1.0757
Unmitigated	0.5906	0.0151	3.6000e-004	1.0757

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.4625 / 0	0.5906	0.0151	3.6000e-004	1.0757
Total		**0.5906**	**0.0151**	**3.6000e-004**	**1.0757**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.4625 / 0	0.5906	0.0151	3.6000e-004	1.0757
Total		**0.5906**	**0.0151**	**3.6000e-004**	**1.0757**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.5034	0.0298	0.0000	1.2472
Unmitigated	0.5034	0.0298	0.0000	1.2472

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	2.48	0.5034	0.0298	0.0000	1.2472
Total		**0.5034**	**0.0298**	**0.0000**	**1.2472**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	2.48	0.5034	0.0298	0.0000	1.2472
Total		**0.5034**	**0.0298**	**0.0000**	**1.2472**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Booster Pump Station A

South Central Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	2.00	1000sqft	0.59	2,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on information provided by the applicant. Area of disturbance is approximatley 25,800 square feet. 2,000 sf concrete building

Construction Phase - Adjusted construction schedule to meet applicant provided schedule.

Off-road Equipment - Default construction equipment was used.

Off-road Equipment - Based on project details, added Off-highway trucks to default construction equipment list

Off-road Equipment - Based on project details, added excavator to default construction equipment list.

Off-road Equipment - Default construction equipment was used.

Off-road Equipment - Default construction equipment was used

Trips and VMT - Information provided by the applicant

Grading -

Architectural Coating - Based on VCAPCD Rule 74.2 - Architectural Coatings

Vehicle Trips - 50 maintainence trips per year. Assumed all primary C-C trips.

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Based on VCAPCD Rule 74.2 Architectural Coating

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on VCAPCD Rule 55

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	100.00	306.00
tblConstructionPhase	NumDays	2.00	6.00
tblConstructionPhase	NumDays	1.00	3.00
tblLandUse	LotAcreage	0.05	0.59
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	1.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblVehicleTrips	CC_TTP	28.00	100.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.99	0.00
tblVehicleTrips	SU_TR	5.00	0.00
tblVehicleTrips	WD_TR	4.96	0.10

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.1735	11.7536	10.7434	0.0257	5.4397	0.4965	5.9362	2.6024	0.4568	3.0592	0.0000	2,493.7654	2,493.7654	0.7737	2.6500e-003	2,513.8986
2024	3.1969	10.5671	12.7918	0.0297	0.2555	0.4643	0.7198	0.0677	0.4320	0.4998	0.0000	2,880.2047	2,880.2047	0.7919	4.9200e-003	2,901.4676
Maximum	**3.1969**	**11.7536**	**12.7918**	**0.0297**	**5.4397**	**0.4965**	**5.9362**	**2.6024**	**0.4568**	**3.0592**	**0.0000**	**2,880.2047**	**2,880.2047**	**0.7919**	**4.9200e-003**	**2,901.4676**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.1735	11.7536	10.7434	0.0257	2.5181	0.4965	3.0146	1.1897	0.4568	1.6465	0.0000	2,493.7654	2,493.7654	0.7737	2.6500e-003	2,513.8986
2024	3.1969	10.5671	12.7918	0.0297	0.2555	0.4643	0.7198	0.0677	0.4320	0.4998	0.0000	2,880.2047	2,880.2047	0.7919	4.9200e-003	2,901.4676
Maximum	**3.1969**	**11.7536**	**12.7918**	**0.0297**	**2.5181**	**0.4965**	**3.0146**	**1.1897**	**0.4568**	**1.6465**	**0.0000**	**2,880.2047**	**2,880.2047**	**0.7919**	**4.9200e-003**	**2,901.4676**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	51.30	0.00	43.89	52.91	0.00	39.69	0.00	0.00	0.00	0.00	0.00	0.00

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0454	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Energy	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623
Mobile	5.7000e-004	6.4000e-004	4.7100e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004		0.9920	0.9920	7.0000e-005	5.0000e-005	1.0078
Total	**0.0472**	**0.0118**	**0.0143**	**8.0000e-005**	**1.0100e-003**	**8.6000e-004**	**1.8700e-003**	**2.7000e-004**	**8.6000e-004**	**1.1300e-003**		**14.3752**	**14.3752**	**3.3000e-004**	**3.0000e-004**	**14.4705**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0454	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Energy	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623
Mobile	5.7000e-004	6.4000e-004	4.7100e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004		0.9920	0.9920	7.0000e-005	5.0000e-005	1.0078
Total	**0.0472**	**0.0118**	**0.0143**	**8.0000e-005**	**1.0100e-003**	**8.6000e-004**	**1.8700e-003**	**2.7000e-004**	**8.6000e-004**	**1.1300e-003**		**14.3752**	**14.3752**	**3.3000e-004**	**3.0000e-004**	**14.4705**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/6/2023	9/8/2023	5	3	
2	Grading	Grading	9/11/2023	9/18/2023	5	6	
3	Building Construction	Building Construction	9/19/2023	11/19/2024	5	306	
4	Architectural Coating	Architectural Coating	11/19/2024	11/25/2024	5	5	
5	Paving	Paving	11/20/2024	11/26/2024	5	5	

Acres of Grading (Site Preparation Phase): 1.5

Acres of Grading (Grading Phase): 4.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 3,000; Non-Residential Outdoor: 1,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**		**942.4317**	**942.4317**	**0.3048**		**950.0517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0374	0.0261	0.3578	1.0700e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		109.2681	109.2681	2.5500e-003	2.6500e-003	110.1213
Total	**0.0374**	**0.0261**	**0.3578**	**1.0700e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**109.2681**	**109.2681**	**2.5500e-003**	**2.6500e-003**	**110.1213**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.2386**	**0.2266**	**0.4652**	**0.0258**	**0.2084**	**0.2342**	**0.0000**	**942.4317**	**942.4317**	**0.3048**		**950.0517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0374	0.0261	0.3578	1.0700e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		109.2681	109.2681	2.5500e-003	2.6500e-003	110.1213
Total	**0.0374**	**0.0261**	**0.3578**	**1.0700e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**109.2681**	**109.2681**	**2.5500e-003**	**2.6500e-003**	**110.1213**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	1.1222	11.7275	8.8094	0.0193		0.4959	0.4959		0.4562	0.4562		1,864.8770	1,864.8770	0.6031		1,879.9554
Total	**1.1222**	**11.7275**	**8.8094**	**0.0193**	**5.3119**	**0.4959**	**5.8078**	**2.5686**	**0.4562**	**3.0248**		**1,864.8770**	**1,864.8770**	**0.6031**		**1,879.9554**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0374	0.0261	0.3578	1.0700e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		109.2681	109.2681	2.5500e-003	2.6500e-003	110.1213
Total	**0.0374**	**0.0261**	**0.3578**	**1.0700e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**109.2681**	**109.2681**	**2.5500e-003**	**2.6500e-003**	**110.1213**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3904	0.0000	2.3904	1.1559	0.0000	1.1559			0.0000			0.0000
Off-Road	1.1222	11.7275	8.8094	0.0193		0.4959	0.4959		0.4562	0.4562	0.0000	1,864.8770	1,864.8770	0.6031		1,879.9554
Total	**1.1222**	**11.7275**	**8.8094**	**0.0193**	**2.3904**	**0.4959**	**2.8863**	**1.1559**	**0.4562**	**1.6121**	**0.0000**	**1,864.8770**	**1,864.8770**	**0.6031**		**1,879.9554**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0374	0.0261	0.3578	1.0700e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		109.2681	109.2681	2.5500e-003	2.6500e-003	110.1213
Total	**0.0374**	**0.0261**	**0.3578**	**1.0700e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**109.2681**	**109.2681**	**2.5500e-003**	**2.6500e-003**	**110.1213**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1361	9.9865	10.3855	0.0246		0.4493	0.4493		0.4133	0.4133		2,384.4974	2,384.4974	0.7712		2,403.7772
Total	**1.1361**	**9.9865**	**10.3855**	**0.0246**		**0.4493**	**0.4493**		**0.4133**	**0.4133**		**2,384.4974**	**2,384.4974**	**0.7712**		**2,403.7772**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0374	0.0261	0.3578	1.0700e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		109.2681	109.2681	2.5500e-003	2.6500e-003	110.1213
Total	**0.0374**	**0.0261**	**0.3578**	**1.0700e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**109.2681**	**109.2681**	**2.5500e-003**	**2.6500e-003**	**110.1213**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1361	9.9865	10.3855	0.0246		0.4493	0.4493		0.4133	0.4133	0.0000	2,384.4974	2,384.4974	0.7712		2,403.7772
Total	**1.1361**	**9.9865**	**10.3855**	**0.0246**		**0.4493**	**0.4493**		**0.4133**	**0.4133**	**0.0000**	**2,384.4974**	**2,384.4974**	**0.7712**		**2,403.7772**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0374	0.0261	0.3578	1.0700e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		109.2681	109.2681	2.5500e-003	2.6500e-003	110.1213
Total	**0.0374**	**0.0261**	**0.3578**	**1.0700e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**109.2681**	**109.2681**	**2.5500e-003**	**2.6500e-003**	**110.1213**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0921	9.3018	10.3177	0.0246		0.4022	0.4022		0.3700	0.3700		2,385.3338	2,385.3338	0.7715		2,404.6205
Total	**1.0921**	**9.3018**	**10.3177**	**0.0246**		**0.4022**	**0.4022**		**0.3700**	**0.3700**		**2,385.3338**	**2,385.3338**	**0.7715**		**2,404.6205**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0350	0.0232	0.3320	1.0300e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		106.7114	106.7114	2.3100e-003	2.4600e-003	107.5014
Total	**0.0350**	**0.0232**	**0.3320**	**1.0300e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**106.7114**	**106.7114**	**2.3100e-003**	**2.4600e-003**	**107.5014**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0921	9.3018	10.3177	0.0246		0.4022	0.4022		0.3700	0.3700	0.0000	2,385.3338	2,385.3338	0.7715		2,404.6205
Total	**1.0921**	**9.3018**	**10.3177**	**0.0246**		**0.4022**	**0.4022**		**0.3700**	**0.3700**	**0.0000**	**2,385.3338**	**2,385.3338**	**0.7715**		**2,404.6205**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0350	0.0232	0.3320	1.0300e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		106.7114	106.7114	2.3100e-003	2.4600e-003	107.5014
Total	**0.0350**	**0.0232**	**0.3320**	**1.0300e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**106.7114**	**106.7114**	**2.3100e-003**	**2.4600e-003**	**107.5014**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.8540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**2.0348**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0350	0.0232	0.3320	1.0300e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		106.7114	106.7114	2.3100e-003	2.4600e-003	107.5014
Total	**0.0350**	**0.0232**	**0.3320**	**1.0300e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**106.7114**	**106.7114**	**2.3100e-003**	**2.4600e-003**	**107.5014**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.8540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**2.0348**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0350	0.0232	0.3320	1.0300e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		106.7114	106.7114	2.3100e-003	2.4600e-003	107.5014
Total	**0.0350**	**0.0232**	**0.3320**	**1.0300e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**106.7114**	**106.7114**	**2.3100e-003**	**2.4600e-003**	**107.5014**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269		1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5904**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**		**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0350	0.0232	0.3320	1.0300e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		106.7114	106.7114	2.3100e-003	2.4600e-003	107.5014
Total	**0.0350**	**0.0232**	**0.3320**	**1.0300e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**106.7114**	**106.7114**	**2.3100e-003**	**2.4600e-003**	**107.5014**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269	0.0000	1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5904**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**	**0.0000**	**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0350	0.0232	0.3320	1.0300e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		106.7114	106.7114	2.3100e-003	2.4600e-003	107.5014
Total	**0.0350**	**0.0232**	**0.3320**	**1.0300e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**106.7114**	**106.7114**	**2.3100e-003**	**2.4600e-003**	**107.5014**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.7000e-004	6.4000e-004	4.7100e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004		0.9920	0.9920	7.0000e-005	5.0000e-005	1.0078
Unmitigated	5.7000e-004	6.4000e-004	4.7100e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004		0.9920	0.9920	7.0000e-005	5.0000e-005	1.0078

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.20	0.00	0.00	343	343
Total	0.20	0.00	0.00	343	343

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.518500	0.056626	0.189643	0.140762	0.030399	0.007841	0.010730	0.006132	0.000824	0.000442	0.030440	0.001544	0.006118

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623
NaturalGas Unmitigated	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	113.753	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623
Total		**1.2300e-003**	**0.0112**	**9.3700e-003**	**7.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**		**13.3828**	**13.3828**	**2.6000e-004**	**2.5000e-004**	**13.4623**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0.113753	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623
Total		**1.2300e-003**	**0.0112**	**9.3700e-003**	**7.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**		**13.3828**	**13.3828**	**2.6000e-004**	**2.5000e-004**	**13.4623**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0454	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Unmitigated	0.0454	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.5400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0428					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Total	**0.0454**	**0.0000**	**2.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**4.4000e-004**	**4.4000e-004**	**0.0000**		**4.7000e-004**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.5400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0428					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Total	**0.0454**	**0.0000**	**2.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**4.4000e-004**	**4.4000e-004**	**0.0000**		**4.7000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Booster Pump Station A

South Central Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	2.00	1000sqft	0.59	2,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on information provided by the applicant. Area of disturbance is approximatley 25,800 square feet. 2,000 sf concrete building

Construction Phase - Adjusted construction schedule to meet applicant provided schedule.

Off-road Equipment - Default construction equipment was used.

Off-road Equipment - Based on project details, added Off-highway trucks to default construction equipment list

Off-road Equipment - Based on project details, added excavator to default construction equipment list.

Off-road Equipment - Default construction equipment was used.

Off-road Equipment - Default construction equipment was used

Trips and VMT - Information provided by the applicant

Grading -

Architectural Coating - Based on VCAPCD Rule 74.2 - Architectural Coatings

Vehicle Trips - 50 maintainence trips per year. Assumed all primary C-C trips.

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Based on VCAPCD Rule 74.2 Architectural Coating

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on VCAPCD Rule 55

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	100.00	306.00
tblConstructionPhase	NumDays	2.00	6.00
tblConstructionPhase	NumDays	1.00	3.00
tblLandUse	LotAcreage	0.05	0.59
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	1.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblVehicleTrips	CC_TTP	28.00	100.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.99	0.00
tblVehicleTrips	SU_TR	5.00	0.00
tblVehicleTrips	WD_TR	4.96	0.10

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.1781	11.7576	10.7330	0.0257	5.4397	0.4965	5.9362	2.6024	0.4568	3.0592	0.0000	2,489.6790	2,489.6790	0.7739	2.9200e-003	2,509.8954
2024	3.2058	10.5742	12.7735	0.0296	0.2555	0.4643	0.7198	0.0677	0.4320	0.4998	0.0000	2,872.2426	2,872.2426	0.7922	5.4000e-003	2,893.6595
Maximum	**3.2058**	**11.7576**	**12.7735**	**0.0296**	**5.4397**	**0.4965**	**5.9362**	**2.6024**	**0.4568**	**3.0592**	**0.0000**	**2,872.2426**	**2,872.2426**	**0.7922**	**5.4000e-003**	**2,893.6595**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.1781	11.7576	10.7330	0.0257	2.5181	0.4965	3.0146	1.1897	0.4568	1.6465	0.0000	2,489.6790	2,489.6790	0.7739	2.9200e-003	2,509.8954
2024	3.2058	10.5742	12.7735	0.0296	0.2555	0.4643	0.7198	0.0677	0.4320	0.4998	0.0000	2,872.2426	2,872.2426	0.7922	5.4000e-003	2,893.6595
Maximum	**3.2058**	**11.7576**	**12.7735**	**0.0296**	**2.5181**	**0.4965**	**3.0146**	**1.1897**	**0.4568**	**1.6465**	**0.0000**	**2,872.2426**	**2,872.2426**	**0.7922**	**5.4000e-003**	**2,893.6595**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	51.30	0.00	43.89	52.91	0.00	39.69	0.00	0.00	0.00	0.00	0.00	0.00

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0454	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Energy	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623
Mobile	5.6000e-004	7.0000e-004	5.0500e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004		0.9648	0.9648	7.0000e-005	5.0000e-005	0.9816
Total	**0.0472**	**0.0119**	**0.0146**	**8.0000e-005**	**1.0100e-003**	**8.6000e-004**	**1.8700e-003**	**2.7000e-004**	**8.6000e-004**	**1.1300e-003**		**14.3480**	**14.3480**	**3.3000e-004**	**3.0000e-004**	**14.4443**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0454	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Energy	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623
Mobile	5.6000e-004	7.0000e-004	5.0500e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004		0.9648	0.9648	7.0000e-005	5.0000e-005	0.9816
Total	**0.0472**	**0.0119**	**0.0146**	**8.0000e-005**	**1.0100e-003**	**8.6000e-004**	**1.8700e-003**	**2.7000e-004**	**8.6000e-004**	**1.1300e-003**		**14.3480**	**14.3480**	**3.3000e-004**	**3.0000e-004**	**14.4443**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/6/2023	9/8/2023	5	3	
2	Grading	Grading	9/11/2023	9/18/2023	5	6	
3	Building Construction	Building Construction	9/19/2023	11/19/2024	5	306	
4	Architectural Coating	Architectural Coating	11/19/2024	11/25/2024	5	5	
5	Paving	Paving	11/20/2024	11/26/2024	5	5	

Acres of Grading (Site Preparation Phase): 1.5

Acres of Grading (Grading Phase): 4.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 3,000; Non-Residential Outdoor: 1,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**		**942.4317**	**942.4317**	**0.3048**		**950.0517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0420	0.0301	0.3475	1.0300e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		105.1816	105.1816	2.7000e-003	2.9200e-003	106.1181
Total	**0.0420**	**0.0301**	**0.3475**	**1.0300e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**105.1816**	**105.1816**	**2.7000e-003**	**2.9200e-003**	**106.1181**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.2386**	**0.2266**	**0.4652**	**0.0258**	**0.2084**	**0.2342**	**0.0000**	**942.4317**	**942.4317**	**0.3048**		**950.0517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0420	0.0301	0.3475	1.0300e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		105.1816	105.1816	2.7000e-003	2.9200e-003	106.1181
Total	**0.0420**	**0.0301**	**0.3475**	**1.0300e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**105.1816**	**105.1816**	**2.7000e-003**	**2.9200e-003**	**106.1181**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	1.1222	11.7275	8.8094	0.0193		0.4959	0.4959		0.4562	0.4562		1,864.8770	1,864.8770	0.6031		1,879.9554
Total	**1.1222**	**11.7275**	**8.8094**	**0.0193**	**5.3119**	**0.4959**	**5.8078**	**2.5686**	**0.4562**	**3.0248**		**1,864.8770**	**1,864.8770**	**0.6031**		**1,879.9554**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0420	0.0301	0.3475	1.0300e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		105.1816	105.1816	2.7000e-003	2.9200e-003	106.1181
Total	**0.0420**	**0.0301**	**0.3475**	**1.0300e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**105.1816**	**105.1816**	**2.7000e-003**	**2.9200e-003**	**106.1181**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3904	0.0000	2.3904	1.1559	0.0000	1.1559			0.0000			0.0000
Off-Road	1.1222	11.7275	8.8094	0.0193		0.4959	0.4959		0.4562	0.4562	0.0000	1,864.8770	1,864.8770	0.6031		1,879.9554
Total	**1.1222**	**11.7275**	**8.8094**	**0.0193**	**2.3904**	**0.4959**	**2.8863**	**1.1559**	**0.4562**	**1.6121**	**0.0000**	**1,864.8770**	**1,864.8770**	**0.6031**		**1,879.9554**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0420	0.0301	0.3475	1.0300e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		105.1816	105.1816	2.7000e-003	2.9200e-003	106.1181
Total	**0.0420**	**0.0301**	**0.3475**	**1.0300e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**105.1816**	**105.1816**	**2.7000e-003**	**2.9200e-003**	**106.1181**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1361	9.9865	10.3855	0.0246		0.4493	0.4493		0.4133	0.4133		2,384.4974	2,384.4974	0.7712		2,403.7772
Total	**1.1361**	**9.9865**	**10.3855**	**0.0246**		**0.4493**	**0.4493**		**0.4133**	**0.4133**		**2,384.4974**	**2,384.4974**	**0.7712**		**2,403.7772**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0420	0.0301	0.3475	1.0300e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		105.1816	105.1816	2.7000e-003	2.9200e-003	106.1181
Total	**0.0420**	**0.0301**	**0.3475**	**1.0300e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**105.1816**	**105.1816**	**2.7000e-003**	**2.9200e-003**	**106.1181**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1361	9.9865	10.3855	0.0246		0.4493	0.4493		0.4133	0.4133	0.0000	2,384.4974	2,384.4974	0.7712		2,403.7772
Total	**1.1361**	**9.9865**	**10.3855**	**0.0246**		**0.4493**	**0.4493**		**0.4133**	**0.4133**	**0.0000**	**2,384.4974**	**2,384.4974**	**0.7712**		**2,403.7772**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0420	0.0301	0.3475	1.0300e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		105.1816	105.1816	2.7000e-003	2.9200e-003	106.1181
Total	**0.0420**	**0.0301**	**0.3475**	**1.0300e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**105.1816**	**105.1816**	**2.7000e-003**	**2.9200e-003**	**106.1181**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0921	9.3018	10.3177	0.0246		0.4022	0.4022		0.3700	0.3700		2,385.3338	2,385.3338	0.7715		2,404.6205
Total	**1.0921**	**9.3018**	**10.3177**	**0.0246**		**0.4022**	**0.4022**		**0.3700**	**0.3700**		**2,385.3338**	**2,385.3338**	**0.7715**		**2,404.6205**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0395	0.0268	0.3228	1.0000e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		102.7304	102.7304	2.4500e-003	2.7000e-003	103.5974
Total	**0.0395**	**0.0268**	**0.3228**	**1.0000e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**102.7304**	**102.7304**	**2.4500e-003**	**2.7000e-003**	**103.5974**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0921	9.3018	10.3177	0.0246		0.4022	0.4022		0.3700	0.3700	0.0000	2,385.3338	2,385.3338	0.7715		2,404.6205
Total	**1.0921**	**9.3018**	**10.3177**	**0.0246**		**0.4022**	**0.4022**		**0.3700**	**0.3700**	**0.0000**	**2,385.3338**	**2,385.3338**	**0.7715**		**2,404.6205**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0395	0.0268	0.3228	1.0000e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		102.7304	102.7304	2.4500e-003	2.7000e-003	103.5974
Total	**0.0395**	**0.0268**	**0.3228**	**1.0000e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**102.7304**	**102.7304**	**2.4500e-003**	**2.7000e-003**	**103.5974**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.8540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**2.0348**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0395	0.0268	0.3228	1.0000e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		102.7304	102.7304	2.4500e-003	2.7000e-003	103.5974
Total	**0.0395**	**0.0268**	**0.3228**	**1.0000e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**102.7304**	**102.7304**	**2.4500e-003**	**2.7000e-003**	**103.5974**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.8540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**2.0348**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0395	0.0268	0.3228	1.0000e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		102.7304	102.7304	2.4500e-003	2.7000e-003	103.5974
Total	**0.0395**	**0.0268**	**0.3228**	**1.0000e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**102.7304**	**102.7304**	**2.4500e-003**	**2.7000e-003**	**103.5974**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269		1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5904**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**		**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0395	0.0268	0.3228	1.0000e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		102.7304	102.7304	2.4500e-003	2.7000e-003	103.5974
Total	**0.0395**	**0.0268**	**0.3228**	**1.0000e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**102.7304**	**102.7304**	**2.4500e-003**	**2.7000e-003**	**103.5974**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269	0.0000	1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5904**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**	**0.0000**	**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0395	0.0268	0.3228	1.0000e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		102.7304	102.7304	2.4500e-003	2.7000e-003	103.5974
Total	**0.0395**	**0.0268**	**0.3228**	**1.0000e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**102.7304**	**102.7304**	**2.4500e-003**	**2.7000e-003**	**103.5974**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.6000e-004	7.0000e-004	5.0500e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004		0.9648	0.9648	7.0000e-005	5.0000e-005	0.9816
Unmitigated	5.6000e-004	7.0000e-004	5.0500e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004		0.9648	0.9648	7.0000e-005	5.0000e-005	0.9816

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.20	0.00	0.00	343	343
Total	0.20	0.00	0.00	343	343

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.518500	0.056626	0.189643	0.140762	0.030399	0.007841	0.010730	0.006132	0.000824	0.000442	0.030440	0.001544	0.006118

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623
NaturalGas Unmitigated	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	113.753	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623
Total		**1.2300e-003**	**0.0112**	**9.3700e-003**	**7.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**		**13.3828**	**13.3828**	**2.6000e-004**	**2.5000e-004**	**13.4623**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0.113753	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623
Total		**1.2300e-003**	**0.0112**	**9.3700e-003**	**7.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**		**13.3828**	**13.3828**	**2.6000e-004**	**2.5000e-004**	**13.4623**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0454	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Unmitigated	0.0454	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.5400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0428					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Total	**0.0454**	**0.0000**	**2.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**4.4000e-004**	**4.4000e-004**	**0.0000**		**4.7000e-004**

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.5400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0428					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Total	**0.0454**	**0.0000**	**2.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**4.4000e-004**	**4.4000e-004**	**0.0000**		**4.7000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

VTA-SB Counties Intertie Project - Booster Pump Station A - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements

South Central Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	4.71	1000sqft	0.29	4,710.00	0
Other Non-Asphalt Surfaces	0.65	1000sqft	0.01	650.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Infrastructure improvements are assumed 10 percent of pipeline area. Total square feet = (900 sf booster pump station x 38,100 pipeline(.10)) = 4,710 sf. And 130 LF pipeline replaced at Rincon Pump Plant. 8,900 sf distrubance area for BPS-B.

Construction Phase - Construction Schedule adjusted to match applicant provided schedule.

Off-road Equipment - Used default construction equipment list.

Off-road Equipment - Based on project details, added off-highway trucks to default construction equipment list.

Off-road Equipment - Based on project details, added excavators to other default equipment list.

Off-road Equipment - Used default construction equipment list

Off-road Equipment - Used Default construction equipment

Trips and VMT - Trips based on information provided by the applicant.

Grading -

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating - Based on VCAPCD Rule 74.2 Architectural Coating

Vehicle Trips - 50 maintenance trips per year. Assume all primary C-C trips

Area Coating - Based on VCAPCD Rule 74.2 Architectural Coating

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on VCAPCD Rule 55

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	1.00	3.00
tblConstructionPhase	NumDays	2.00	7.00
tblConstructionPhase	NumDays	100.00	335.00
tblLandUse	LotAcreage	0.11	0.29
tblTripsAndVMT	VendorTripNumber	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	2.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblVehicleTrips	CC_TTP	28.00	100.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.99	0.00
tblVehicleTrips	SU_TR	5.00	0.00
tblVehicleTrips	WD_TR	4.96	0.05

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0136	0.1255	0.1176	2.8000e-004	0.0204	5.4500e-003	0.0258	9.3400e-003	5.0100e-003	0.0144	0.0000	24.2065	24.2065	7.6000e-003	2.0000e-005	24.4036
2024	0.1466	1.2210	1.3811	3.3100e-003	0.0105	0.0527	0.0633	2.8000e-003	0.0485	0.0513	0.0000	291.4494	291.4494	0.0919	2.3000e-004	293.8156
2025	0.0437	0.2578	0.3255	7.7000e-004	2.7300e-003	0.0107	0.0134	7.3000e-004	9.8200e-003	0.0106	0.0000	67.7607	67.7607	0.0211	6.0000e-005	68.3040
Maximum	**0.1466**	**1.2210**	**1.3811**	**3.3100e-003**	**0.0204**	**0.0527**	**0.0633**	**9.3400e-003**	**0.0485**	**0.0513**	**0.0000**	**291.4494**	**291.4494**	**0.0919**	**2.3000e-004**	**293.8156**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0136	0.1255	0.1176	2.8000e-004	9.7300e-003	5.4500e-003	0.0152	4.3500e-003	5.0100e-003	9.3700e-003	0.0000	24.2065	24.2065	7.6000e-003	2.0000e-005	24.4036
2024	0.1466	1.2210	1.3811	3.3100e-003	0.0105	0.0527	0.0633	2.8000e-003	0.0485	0.0513	0.0000	291.4491	291.4491	0.0919	2.3000e-004	293.8153
2025	0.0437	0.2578	0.3255	7.7000e-004	2.7300e-003	0.0107	0.0134	7.3000e-004	9.8200e-003	0.0106	0.0000	67.7606	67.7606	0.0211	6.0000e-005	68.3039
Maximum	**0.1466**	**1.2210**	**1.3811**	**3.3100e-003**	**0.0105**	**0.0527**	**0.0633**	**4.3500e-003**	**0.0485**	**0.0513**	**0.0000**	**291.4491**	**291.4491**	**0.0919**	**2.3000e-004**	**293.8153**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**31.69**	**0.00**	**10.40**	**38.77**	**0.00**	**6.55**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**11-27-2023**	**2-26-2024**	0.3451	0.3451
2	**2-27-2024**	**5-26-2024**	0.3356	0.3356
3	**5-27-2024**	**8-26-2024**	0.3429	0.3429
4	**8-27-2024**	**11-26-2024**	0.3430	0.3430
5	**11-27-2024**	**2-26-2025**	0.3223	0.3223
6	**2-27-2025**	**5-26-2025**	0.1018	0.1018
		Highest	0.3451	0.3451

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0196	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004
Energy	5.3000e-004	4.7900e-003	4.0300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	12.1258	12.1258	6.8000e-004	1.7000e-004	12.1925
Mobile	8.0000e-005	1.1000e-004	7.7000e-004	0.0000	1.7000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.1443	0.1443	1.0000e-005	1.0000e-005	0.1466
Waste						0.0000	0.0000		0.0000	0.0000	1.1855	0.0000	1.1855	0.0701	0.0000	2.9369
Water						0.0000	0.0000		0.0000	0.0000	0.3456	1.0452	1.3908	0.0356	8.5000e-004	2.5332
Total	**0.0202**	**4.9000e-003**	**4.8500e-003**	**3.0000e-005**	**1.7000e-004**	**3.6000e-004**	**5.3000e-004**	**4.0000e-005**	**3.6000e-004**	**4.1000e-004**	**1.5310**	**13.3154**	**14.8464**	**0.1063**	**1.0300e-003**	**17.8093**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0196	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004
Energy	5.3000e-004	4.7900e-003	4.0300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	12.1258	12.1258	6.8000e-004	1.7000e-004	12.1925
Mobile	8.0000e-005	1.1000e-004	7.7000e-004	0.0000	1.7000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.1443	0.1443	1.0000e-005	1.0000e-005	0.1466
Waste						0.0000	0.0000		0.0000	0.0000	1.1855	0.0000	1.1855	0.0701	0.0000	2.9369
Water						0.0000	0.0000		0.0000	0.0000	0.3456	1.0452	1.3908	0.0356	8.5000e-004	2.5332
Total	**0.0202**	**4.9000e-003**	**4.8500e-003**	**3.0000e-005**	**1.7000e-004**	**3.6000e-004**	**5.3000e-004**	**4.0000e-005**	**3.6000e-004**	**4.1000e-004**	**1.5310**	**13.3154**	**14.8464**	**0.1063**	**1.0300e-003**	**17.8093**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/27/2023	11/29/2023	5	3	
2	Grading	Grading	11/30/2023	12/8/2023	5	7	
3	Building Construction	Building Construction	12/11/2023	3/21/2025	5	335	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Architectural Coating	Architectural Coating	3/21/2025	3/27/2025	5	5	
5	Paving	Paving	3/24/2025	3/28/2025	5	5	

Acres of Grading (Site Preparation Phase): 1.5

Acres of Grading (Grading Phase): 5.25

Acres of Paving: 0.01

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,065; Non-Residential Outdoor: 2,355; Striped Parking Area: 39 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.0000e-004	0.0000	8.0000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-004	9.2800e-003	5.8900e-003	1.0000e-005		3.4000e-004	3.4000e-004		3.1000e-004	3.1000e-004	0.0000	1.2824	1.2824	4.1000e-004	0.0000	1.2928
Total	**8.0000e-004**	**9.2800e-003**	**5.8900e-003**	**1.0000e-005**	**8.0000e-004**	**3.4000e-004**	**1.1400e-003**	**9.0000e-005**	**3.1000e-004**	**4.0000e-004**	**0.0000**	**1.2824**	**1.2824**	**4.1000e-004**	**0.0000**	**1.2928**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.6000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0935	0.0935	0.0000	0.0000	0.0944
Total	**4.0000e-005**	**3.0000e-005**	**3.6000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0935**	**0.0935**	**0.0000**	**0.0000**	**0.0944**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.6000e-004	0.0000	3.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-004	9.2800e-003	5.8900e-003	1.0000e-005		3.4000e-004	3.4000e-004		3.1000e-004	3.1000e-004	0.0000	1.2824	1.2824	4.1000e-004	0.0000	1.2928
Total	**8.0000e-004**	**9.2800e-003**	**5.8900e-003**	**1.0000e-005**	**3.6000e-004**	**3.4000e-004**	**7.0000e-004**	**4.0000e-005**	**3.1000e-004**	**3.5000e-004**	**0.0000**	**1.2824**	**1.2824**	**4.1000e-004**	**0.0000**	**1.2928**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.6000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0935	0.0935	0.0000	0.0000	0.0944
Total	**4.0000e-005**	**3.0000e-005**	**3.6000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0935**	**0.0935**	**0.0000**	**0.0000**	**0.0944**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0186	0.0000	0.0186	8.9900e-003	0.0000	8.9900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9300e-003	0.0411	0.0308	7.0000e-005		1.7400e-003	1.7400e-003		1.6000e-003	1.6000e-003	0.0000	5.9213	5.9213	1.9200e-003	0.0000	5.9691
Total	**3.9300e-003**	**0.0411**	**0.0308**	**7.0000e-005**	**0.0186**	**1.7400e-003**	**0.0203**	**8.9900e-003**	**1.6000e-003**	**0.0106**	**0.0000**	**5.9213**	**5.9213**	**1.9200e-003**	**0.0000**	**5.9691**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	8.5000e-004	0.0000	2.8000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.2181	0.2181	1.0000e-005	1.0000e-005	0.2203
Total	**1.0000e-004**	**7.0000e-005**	**8.5000e-004**	**0.0000**	**2.8000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2181**	**0.2181**	**1.0000e-005**	**1.0000e-005**	**0.2203**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.3700e-003	0.0000	8.3700e-003	4.0500e-003	0.0000	4.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9300e-003	0.0411	0.0308	7.0000e-005		1.7400e-003	1.7400e-003		1.6000e-003	1.6000e-003	0.0000	5.9213	5.9213	1.9200e-003	0.0000	5.9691
Total	**3.9300e-003**	**0.0411**	**0.0308**	**7.0000e-005**	**8.3700e-003**	**1.7400e-003**	**0.0101**	**4.0500e-003**	**1.6000e-003**	**5.6500e-003**	**0.0000**	**5.9213**	**5.9213**	**1.9200e-003**	**0.0000**	**5.9691**

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	8.5000e-004	0.0000	2.8000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.2181	0.2181	1.0000e-005	1.0000e-005	0.2203
Total	**1.0000e-004**	**7.0000e-005**	**8.5000e-004**	**0.0000**	**2.8000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2181**	**0.2181**	**1.0000e-005**	**1.0000e-005**	**0.2203**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.5200e-003	0.0749	0.0779	1.8000e-004		3.3700e-003	3.3700e-003		3.1000e-003	3.1000e-003	0.0000	16.2239	16.2239	5.2500e-003	0.0000	16.3550
Total	**8.5200e-003**	**0.0749**	**0.0779**	**1.8000e-004**		**3.3700e-003**	**3.3700e-003**		**3.1000e-003**	**3.1000e-003**	**0.0000**	**16.2239**	**16.2239**	**5.2500e-003**	**0.0000**	**16.3550**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.6000e-004	1.8100e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4674	0.4674	1.0000e-005	1.0000e-005	0.4720
Total	**2.2000e-004**	**1.6000e-004**	**1.8100e-003**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**6.1000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4674**	**0.4674**	**1.0000e-005**	**1.0000e-005**	**0.4720**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.5200e-003	0.0749	0.0779	1.8000e-004		3.3700e-003	3.3700e-003		3.1000e-003	3.1000e-003	0.0000	16.2238	16.2238	5.2500e-003	0.0000	16.3550
Total	**8.5200e-003**	**0.0749**	**0.0779**	**1.8000e-004**		**3.3700e-003**	**3.3700e-003**		**3.1000e-003**	**3.1000e-003**	**0.0000**	**16.2238**	**16.2238**	**5.2500e-003**	**0.0000**	**16.3550**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.6000e-004	1.8100e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4674	0.4674	1.0000e-005	1.0000e-005	0.4720
Total	**2.2000e-004**	**1.6000e-004**	**1.8100e-003**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**6.1000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4674**	**0.4674**	**1.0000e-005**	**1.0000e-005**	**0.4720**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1431	1.2185	1.3516	3.2300e-003		0.0527	0.0527		0.0485	0.0485	0.0000	283.4759	283.4759	0.0917	0.0000	285.7680
Total	**0.1431**	**1.2185**	**1.3516**	**3.2300e-003**		**0.0527**	**0.0527**		**0.0485**	**0.0485**	**0.0000**	**283.4759**	**283.4759**	**0.0917**	**0.0000**	**285.7680**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5600e-003	2.4300e-003	0.0295	9.0000e-005	0.0105	5.0000e-005	0.0106	2.8000e-003	5.0000e-005	2.8400e-003	0.0000	7.9735	7.9735	2.4000e-004	2.3000e-004	8.0476
Total	**3.5600e-003**	**2.4300e-003**	**0.0295**	**9.0000e-005**	**0.0105**	**5.0000e-005**	**0.0106**	**2.8000e-003**	**5.0000e-005**	**2.8400e-003**	**0.0000**	**7.9735**	**7.9735**	**2.4000e-004**	**2.3000e-004**	**8.0476**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1431	1.2185	1.3516	3.2300e-003		0.0527	0.0527		0.0485	0.0485	0.0000	283.4756	283.4756	0.0917	0.0000	285.7676
Total	**0.1431**	**1.2185**	**1.3516**	**3.2300e-003**		**0.0527**	**0.0527**		**0.0485**	**0.0485**	**0.0000**	**283.4756**	**283.4756**	**0.0917**	**0.0000**	**285.7676**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5600e-003	2.4300e-003	0.0295	9.0000e-005	0.0105	5.0000e-005	0.0106	2.8000e-003	5.0000e-005	2.8400e-003	0.0000	7.9735	7.9735	2.4000e-004	2.3000e-004	8.0476
Total	**3.5600e-003**	**2.4300e-003**	**0.0295**	**9.0000e-005**	**0.0105**	**5.0000e-005**	**0.0106**	**2.8000e-003**	**5.0000e-005**	**2.8400e-003**	**0.0000**	**7.9735**	**7.9735**	**2.4000e-004**	**2.3000e-004**	**8.0476**

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0298	0.2421	0.2962	7.1000e-004		9.9700e-003	9.9700e-003		9.1700e-003	9.1700e-003	0.0000	62.7519	62.7519	0.0203	0.0000	63.2593
Total	**0.0298**	**0.2421**	**0.2962**	**7.1000e-004**		**9.9700e-003**	**9.9700e-003**		**9.1700e-003**	**9.1700e-003**	**0.0000**	**62.7519**	**62.7519**	**0.0203**	**0.0000**	**63.2593**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4000e-004	4.8000e-004	6.1100e-003	2.0000e-005	2.3300e-003	1.0000e-005	2.3400e-003	6.2000e-004	1.0000e-005	6.3000e-004	0.0000	1.7231	1.7231	5.0000e-005	5.0000e-005	1.7384
Total	**7.4000e-004**	**4.8000e-004**	**6.1100e-003**	**2.0000e-005**	**2.3300e-003**	**1.0000e-005**	**2.3400e-003**	**6.2000e-004**	**1.0000e-005**	**6.3000e-004**	**0.0000**	**1.7231**	**1.7231**	**5.0000e-005**	**5.0000e-005**	**1.7384**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0298	0.2421	0.2962	7.1000e-004		9.9700e-003	9.9700e-003		9.1700e-003	9.1700e-003	0.0000	62.7518	62.7518	0.0203	0.0000	63.2592
Total	**0.0298**	**0.2421**	**0.2962**	**7.1000e-004**		**9.9700e-003**	**9.9700e-003**		**9.1700e-003**	**9.1700e-003**	**0.0000**	**62.7518**	**62.7518**	**0.0203**	**0.0000**	**63.2592**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4000e-004	4.8000e-004	6.1100e-003	2.0000e-005	2.3300e-003	1.0000e-005	2.3400e-003	6.2000e-004	1.0000e-005	6.3000e-004	0.0000	1.7231	1.7231	5.0000e-005	5.0000e-005	1.7384
Total	**7.4000e-004**	**4.8000e-004**	**6.1100e-003**	**2.0000e-005**	**2.3300e-003**	**1.0000e-005**	**2.3400e-003**	**6.2000e-004**	**1.0000e-005**	**6.3000e-004**	**0.0000**	**1.7231**	**1.7231**	**5.0000e-005**	**5.0000e-005**	**1.7384**

3.5 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0111					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3000e-004	2.8600e-003	4.5200e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.6383	0.6383	3.0000e-005	0.0000	0.6392
Total	**0.0116**	**2.8600e-003**	**4.5200e-003**	**1.0000e-005**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**	**0.0000**	**0.6383**	**0.6383**	**3.0000e-005**	**0.0000**	**0.6392**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.3000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1485	0.1485	0.0000	0.0000	0.1499
Total	**6.0000e-005**	**4.0000e-005**	**5.3000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1485**	**0.1485**	**0.0000**	**0.0000**	**0.1499**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0111					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3000e-004	2.8600e-003	4.5200e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.6383	0.6383	3.0000e-005	0.0000	0.6392
Total	**0.0116**	**2.8600e-003**	**4.5200e-003**	**1.0000e-005**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**	**0.0000**	**0.6383**	**0.6383**	**3.0000e-005**	**0.0000**	**0.6392**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.3000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1485	0.1485	0.0000	0.0000	0.1499
Total	**6.0000e-005**	**4.0000e-005**	**5.3000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1485**	**0.1485**	**0.0000**	**0.0000**	**0.1499**

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4100e-003	0.0123	0.0176	3.0000e-005		5.5000e-004	5.5000e-004		5.1000e-004	5.1000e-004	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.4100e-003**	**0.0123**	**0.0176**	**3.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.1000e-004**	**5.1000e-004**	**0.0000**	**2.3502**	**2.3502**	**6.8000e-004**	**0.0000**	**2.3673**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.3000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1485	0.1485	0.0000	0.0000	0.1499
Total	**6.0000e-005**	**4.0000e-005**	**5.3000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1485**	**0.1485**	**0.0000**	**0.0000**	**0.1499**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4100e-003	0.0123	0.0176	3.0000e-005		5.5000e-004	5.5000e-004		5.1000e-004	5.1000e-004	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.4100e-003**	**0.0123**	**0.0176**	**3.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.1000e-004**	**5.1000e-004**	**0.0000**	**2.3502**	**2.3502**	**6.8000e-004**	**0.0000**	**2.3673**

3.6 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.3000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1485	0.1485	0.0000	0.0000	0.1499
Total	**6.0000e-005**	**4.0000e-005**	**5.3000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1485**	**0.1485**	**0.0000**	**0.0000**	**0.1499**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	8.0000e-005	1.1000e-004	7.7000e-004	0.0000	1.7000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.1443	0.1443	1.0000e-005	1.0000e-005	0.1466
Unmitigated	8.0000e-005	1.1000e-004	7.7000e-004	0.0000	1.7000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.1443	0.1443	1.0000e-005	1.0000e-005	0.1466

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.24	0.00	0.00	447	447
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.24	0.00	0.00	447	447

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	0.00	100.00	0.00	100	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.523110	0.057023	0.188851	0.138134	0.029446	0.007696	0.010914	0.006163	0.000818	0.000438	0.030081	0.001523	0.005803
Other Non-Asphalt Surfaces	0.523110	0.057023	0.188851	0.138134	0.029446	0.007696	0.010914	0.006163	0.000818	0.000438	0.030081	0.001523	0.005803

5.0 Energy Detail

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6.9079	6.9079	5.8000e-004	7.0000e-005	6.9436
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6.9079	6.9079	5.8000e-004	7.0000e-005	6.9436
NaturalGas Mitigated	5.3000e-004	4.7900e-003	4.0300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.2179	5.2179	1.0000e-004	1.0000e-004	5.2489
NaturalGas Unmitigated	5.3000e-004	4.7900e-003	4.0300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.2179	5.2179	1.0000e-004	1.0000e-004	5.2489

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	97779.6	5.3000e-004	4.7900e-003	4.0300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.2179	5.2179	1.0000e-004	1.0000e-004	5.2489
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**5.3000e-004**	**4.7900e-003**	**4.0300e-003**	**3.0000e-005**		**3.6000e-004**	**3.6000e-004**		**3.6000e-004**	**3.6000e-004**	**0.0000**	**5.2179**	**5.2179**	**1.0000e-004**	**1.0000e-004**	**5.2489**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	97779.6	5.3000e-004	4.7900e-003	4.0300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.2179	5.2179	1.0000e-004	1.0000e-004	5.2489
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**5.3000e-004**	**4.7900e-003**	**4.0300e-003**	**3.0000e-005**		**3.6000e-004**	**3.6000e-004**		**3.6000e-004**	**3.6000e-004**	**0.0000**	**5.2179**	**5.2179**	**1.0000e-004**	**1.0000e-004**	**5.2489**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	38951.7	6.9079	5.8000e-004	7.0000e-005	6.9436
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**6.9079**	**5.8000e-004**	**7.0000e-005**	**6.9436**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	38951.7	6.9079	5.8000e-004	7.0000e-005	6.9436
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**6.9079**	**5.8000e-004**	**7.0000e-005**	**6.9436**

6.0 Area Detail

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0196	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004
Unmitigated	0.0196	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.1100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0184					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004
Total	**0.0196**	**0.0000**	**5.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-004**	**1.0000e-004**	**0.0000**	**0.0000**	**1.0000e-004**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.1100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0184					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004
Total	**0.0196**	**0.0000**	**5.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-004**	**1.0000e-004**	**0.0000**	**0.0000**	**1.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.3908	0.0356	8.5000e-004	2.5332
Unmitigated	1.3908	0.0356	8.5000e-004	2.5332

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	1.08919 / 0	1.3908	0.0356	8.5000e-004	2.5332
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.3908**	**0.0356**	**8.5000e-004**	**2.5332**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	1.08919 / 0	1.3908	0.0356	8.5000e-004	2.5332
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.3908**	**0.0356**	**8.5000e-004**	**2.5332**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.1855	0.0701	0.0000	2.9369
Unmitigated	1.1855	0.0701	0.0000	2.9369

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	5.84	1.1855	0.0701	0.0000	2.9369
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**1.1855**	**0.0701**	**0.0000**	**2.9369**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	5.84	1.1855	0.0701	0.0000	2.9369
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**1.1855**	**0.0701**	**0.0000**	**2.9369**

9.0 Operational Offroad

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements

South Central Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	4.71	1000sqft	0.29	4,710.00	0
Other Non-Asphalt Surfaces	0.65	1000sqft	0.01	650.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Infrastructure improvements are assumed 10 percent of pipeline area. Total square feet = (900 sf booster pump station x 38,100 pipeline(.10)) = 4,710 sf. And 130 LF pipeline replaced at Rincon Pump Plant. 8,900 sf distrubance area for BPS-B.

Construction Phase - Construction Schedule adjusted to match applicant provided schedule.

Off-road Equipment - Used default construction equipment list.

Off-road Equipment - Based on project details, added off-highway trucks to default construction equipment list.

Off-road Equipment - Based on project details, added excavators to other default equipment list.

Off-road Equipment - Used default construction equipment list

Off-road Equipment - Used Default construction equipment

Trips and VMT - Trips based on information provided by the applicant.

Grading -

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating - Based on VCAPCD Rule 74.2 Architectural Coating

Vehicle Trips - 50 maintenance trips per year. Assume all primary C-C trips

Area Coating - Based on VCAPCD Rule 74.2 Architectural Coating

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on VCAPCD Rule 55

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	1.00	3.00
tblConstructionPhase	NumDays	2.00	7.00
tblConstructionPhase	NumDays	100.00	335.00
tblLandUse	LotAcreage	0.11	0.29
tblTripsAndVMT	VendorTripNumber	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	2.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblVehicleTrips	CC_TTP	28.00	100.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.99	0.00
tblVehicleTrips	SU_TR	5.00	0.00
tblVehicleTrips	WD_TR	4.96	0.05

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.1650	11.7461	10.6323	0.0253	5.3941	0.4963	5.8904	2.5903	0.4566	3.0470	0.0000	2,455.4405	2,455.4405	0.7733	1.9200e-003	2,475.3447
2024	1.1191	9.3184	10.5473	0.0253	0.0822	0.4026	0.4847	0.0218	0.3704	0.3922	0.0000	2,454.6171	2,454.6171	0.7734	1.7900e-003	2,474.4836
2025	5.7068	9.5234	12.4516	0.0289	0.1643	0.3960	0.5603	0.0436	0.3684	0.4120	0.0000	2,801.9519	2,801.9519	0.7902	3.3400e-003	2,822.7033
Maximum	**5.7068**	**11.7461**	**12.4516**	**0.0289**	**5.3941**	**0.4963**	**5.8904**	**2.5903**	**0.4566**	**3.0470**	**0.0000**	**2,801.9519**	**2,801.9519**	**0.7902**	**3.3400e-003**	**2,822.7033**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.1650	11.7461	10.6323	0.0253	2.4725	0.4963	2.9688	1.1776	0.4566	1.6343	0.0000	2,455.4405	2,455.4405	0.7733	1.9200e-003	2,475.3447
2024	1.1191	9.3184	10.5473	0.0253	0.0822	0.4026	0.4847	0.0218	0.3704	0.3922	0.0000	2,454.6171	2,454.6171	0.7734	1.7900e-003	2,474.4836
2025	5.7068	9.5234	12.4516	0.0289	0.1643	0.3960	0.5603	0.0436	0.3684	0.4120	0.0000	2,801.9519	2,801.9519	0.7902	3.3400e-003	2,822.7033
Maximum	**5.7068**	**11.7461**	**12.4516**	**0.0289**	**2.4725**	**0.4963**	**2.9688**	**1.1776**	**0.4566**	**1.6343**	**0.0000**	**2,801.9519**	**2,801.9519**	**0.7902**	**3.3400e-003**	**2,822.7033**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**51.80**	**0.00**	**42.13**	**53.19**	**0.00**	**36.68**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1072	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003
Energy	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037
Mobile	6.7000e-004	7.6000e-004	5.7200e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004		1.2548	1.2548	8.0000e-005	6.0000e-005	1.2739
Total	**0.1107**	**0.0270**	**0.0283**	**1.7000e-004**	**1.3200e-003**	**2.0100e-003**	**3.3300e-003**	**3.5000e-004**	**2.0100e-003**	**2.3600e-003**		**32.7723**	**32.7723**	**6.8000e-004**	**6.4000e-004**	**32.9788**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1072	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003
Energy	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037
Mobile	6.7000e-004	7.6000e-004	5.7200e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004		1.2548	1.2548	8.0000e-005	6.0000e-005	1.2739
Total	**0.1107**	**0.0270**	**0.0283**	**1.7000e-004**	**1.3200e-003**	**2.0100e-003**	**3.3300e-003**	**3.5000e-004**	**2.0100e-003**	**2.3600e-003**		**32.7723**	**32.7723**	**6.8000e-004**	**6.4000e-004**	**32.9788**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/27/2023	11/29/2023	5	3	
2	Grading	Grading	11/30/2023	12/8/2023	5	7	
3	Building Construction	Building Construction	12/11/2023	3/21/2025	5	335	
4	Architectural Coating	Architectural Coating	3/21/2025	3/27/2025	5	5	
5	Paving	Paving	3/24/2025	3/28/2025	5	5	

Acres of Grading (Site Preparation Phase): 1.5

Acres of Grading (Grading Phase): 5.25

Acres of Paving: 0.01

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,065; Non-Residential Outdoor: 2,355; Striped Parking Area: 39 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**		**942.4317**	**942.4317**	**0.3048**		**950.0517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0289	0.0186	0.2468	6.9000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9432	70.9432	2.0900e-003	1.9200e-003	71.5675
Total	**0.0289**	**0.0186**	**0.2468**	**6.9000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**70.9432**	**70.9432**	**2.0900e-003**	**1.9200e-003**	**71.5675**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.2386**	**0.2266**	**0.4652**	**0.0258**	**0.2084**	**0.2342**	**0.0000**	**942.4317**	**942.4317**	**0.3048**		**950.0517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0289	0.0186	0.2468	6.9000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9432	70.9432	2.0900e-003	1.9200e-003	71.5675
Total	**0.0289**	**0.0186**	**0.2468**	**6.9000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**70.9432**	**70.9432**	**2.0900e-003**	**1.9200e-003**	**71.5675**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	1.1222	11.7275	8.8094	0.0193		0.4959	0.4959		0.4562	0.4562		1,864.8770	1,864.8770	0.6031		1,879.9554
Total	**1.1222**	**11.7275**	**8.8094**	**0.0193**	**5.3119**	**0.4959**	**5.8078**	**2.5686**	**0.4562**	**3.0248**		**1,864.8770**	**1,864.8770**	**0.6031**		**1,879.9554**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0289	0.0186	0.2468	6.9000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9432	70.9432	2.0900e-003	1.9200e-003	71.5675
Total	**0.0289**	**0.0186**	**0.2468**	**6.9000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**70.9432**	**70.9432**	**2.0900e-003**	**1.9200e-003**	**71.5675**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3904	0.0000	2.3904	1.1559	0.0000	1.1559			0.0000			0.0000
Off-Road	1.1222	11.7275	8.8094	0.0193		0.4959	0.4959		0.4562	0.4562	0.0000	1,864.8770	1,864.8770	0.6031		1,879.9554
Total	**1.1222**	**11.7275**	**8.8094**	**0.0193**	**2.3904**	**0.4959**	**2.8863**	**1.1559**	**0.4562**	**1.6121**	**0.0000**	**1,864.8770**	**1,864.8770**	**0.6031**		**1,879.9554**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0289	0.0186	0.2468	6.9000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9432	70.9432	2.0900e-003	1.9200e-003	71.5675
Total	**0.0289**	**0.0186**	**0.2468**	**6.9000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**70.9432**	**70.9432**	**2.0900e-003**	**1.9200e-003**	**71.5675**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1361	9.9865	10.3855	0.0246		0.4493	0.4493		0.4133	0.4133		2,384.4974	2,384.4974	0.7712		2,403.7772
Total	**1.1361**	**9.9865**	**10.3855**	**0.0246**		**0.4493**	**0.4493**		**0.4133**	**0.4133**		**2,384.4974**	**2,384.4974**	**0.7712**		**2,403.7772**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0289	0.0186	0.2468	6.9000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9432	70.9432	2.0900e-003	1.9200e-003	71.5675
Total	**0.0289**	**0.0186**	**0.2468**	**6.9000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**70.9432**	**70.9432**	**2.0900e-003**	**1.9200e-003**	**71.5675**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1361	9.9865	10.3855	0.0246		0.4493	0.4493		0.4133	0.4133	0.0000	2,384.4974	2,384.4974	0.7712		2,403.7772
Total	**1.1361**	**9.9865**	**10.3855**	**0.0246**		**0.4493**	**0.4493**		**0.4133**	**0.4133**	**0.0000**	**2,384.4974**	**2,384.4974**	**0.7712**		**2,403.7772**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0289	0.0186	0.2468	6.9000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9432	70.9432	2.0900e-003	1.9200e-003	71.5675
Total	**0.0289**	**0.0186**	**0.2468**	**6.9000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**70.9432**	**70.9432**	**2.0900e-003**	**1.9200e-003**	**71.5675**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0921	9.3018	10.3177	0.0246		0.4022	0.4022		0.3700	0.3700		2,385.3338	2,385.3338	0.7715		2,404.6205
Total	**1.0921**	**9.3018**	**10.3177**	**0.0246**		**0.4022**	**0.4022**		**0.3700**	**0.3700**		**2,385.3338**	**2,385.3338**	**0.7715**		**2,404.6205**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0271	0.0166	0.2296	6.7000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		69.2833	69.2833	1.8900e-003	1.7900e-003	69.8631
Total	**0.0271**	**0.0166**	**0.2296**	**6.7000e-004**	**0.0822**	**4.0000e-004**	**0.0826**	**0.0218**	**3.7000e-004**	**0.0222**		**69.2833**	**69.2833**	**1.8900e-003**	**1.7900e-003**	**69.8631**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0921	9.3018	10.3177	0.0246		0.4022	0.4022		0.3700	0.3700	0.0000	2,385.3338	2,385.3338	0.7715		2,404.6205
Total	**1.0921**	**9.3018**	**10.3177**	**0.0246**		**0.4022**	**0.4022**		**0.3700**	**0.3700**	**0.0000**	**2,385.3338**	**2,385.3338**	**0.7715**		**2,404.6205**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0271	0.0166	0.2296	6.7000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		69.2833	69.2833	1.8900e-003	1.7900e-003	69.8631
Total	**0.0271**	**0.0166**	**0.2296**	**6.7000e-004**	**0.0822**	**4.0000e-004**	**0.0826**	**0.0218**	**3.7000e-004**	**0.0222**		**69.2833**	**69.2833**	**1.8900e-003**	**1.7900e-003**	**69.8631**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0286	8.3480	10.2137	0.0246		0.3437	0.3437		0.3162	0.3162		2,385.2465	2,385.2465	0.7714		2,404.5324
Total	**1.0286**	**8.3480**	**10.2137**	**0.0246**		**0.3437**	**0.3437**		**0.3162**	**0.3162**		**2,385.2465**	**2,385.2465**	**0.7714**		**2,404.5324**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0254	0.0149	0.2144	6.5000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		67.6287	67.6287	1.7200e-003	1.6700e-003	68.1695
Total	**0.0254**	**0.0149**	**0.2144**	**6.5000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**67.6287**	**67.6287**	**1.7200e-003**	**1.6700e-003**	**68.1695**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0286	8.3480	10.2137	0.0246		0.3437	0.3437		0.3162	0.3162	0.0000	2,385.2465	2,385.2465	0.7714		2,404.5324
Total	**1.0286**	**8.3480**	**10.2137**	**0.0246**		**0.3437**	**0.3437**		**0.3162**	**0.3162**	**0.0000**	**2,385.2465**	**2,385.2465**	**0.7714**		**2,404.5324**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0254	0.0149	0.2144	6.5000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		67.6287	67.6287	1.7200e-003	1.6700e-003	68.1695
Total	**0.0254**	**0.0149**	**0.2144**	**6.5000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**67.6287**	**67.6287**	**1.7200e-003**	**1.6700e-003**	**68.1695**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.4566					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**4.6274**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0254	0.0149	0.2144	6.5000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		67.6287	67.6287	1.7200e-003	1.6700e-003	68.1695
Total	**0.0254**	**0.0149**	**0.2144**	**6.5000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**67.6287**	**67.6287**	**1.7200e-003**	**1.6700e-003**	**68.1695**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.4566					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**4.6274**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0254	0.0149	0.2144	6.5000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		67.6287	67.6287	1.7200e-003	1.6700e-003	68.1695
Total	**0.0254**	**0.0149**	**0.2144**	**6.5000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**67.6287**	**67.6287**	**1.7200e-003**	**1.6700e-003**	**68.1695**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5638	4.9206	7.0257	0.0113		0.2186	0.2186		0.2046	0.2046		1,036.2711	1,036.2711	0.3019		1,043.8179
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5638**	**4.9206**	**7.0257**	**0.0113**		**0.2186**	**0.2186**		**0.2046**	**0.2046**		**1,036.2711**	**1,036.2711**	**0.3019**		**1,043.8179**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0254	0.0149	0.2144	6.5000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		67.6287	67.6287	1.7200e-003	1.6700e-003	68.1695
Total	**0.0254**	**0.0149**	**0.2144**	**6.5000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**67.6287**	**67.6287**	**1.7200e-003**	**1.6700e-003**	**68.1695**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5638	4.9206	7.0257	0.0113		0.2186	0.2186		0.2046	0.2046	0.0000	1,036.2711	1,036.2711	0.3019		1,043.8179
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5638**	**4.9206**	**7.0257**	**0.0113**		**0.2186**	**0.2186**		**0.2046**	**0.2046**	**0.0000**	**1,036.2711**	**1,036.2711**	**0.3019**		**1,043.8179**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0254	0.0149	0.2144	6.5000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		67.6287	67.6287	1.7200e-003	1.6700e-003	68.1695
Total	**0.0254**	**0.0149**	**0.2144**	**6.5000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**67.6287**	**67.6287**	**1.7200e-003**	**1.6700e-003**	**68.1695**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.7000e-004	7.6000e-004	5.7200e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004		1.2548	1.2548	8.0000e-005	6.0000e-005	1.2739
Unmitigated	6.7000e-004	7.6000e-004	5.7200e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004		1.2548	1.2548	8.0000e-005	6.0000e-005	1.2739

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.24	0.00	0.00	447	447
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.24	0.00	0.00	447	447

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	0.00	100.00	0.00	100	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.523110	0.057023	0.188851	0.138134	0.029446	0.007696	0.010914	0.006163	0.000818	0.000438	0.030081	0.001523	0.005803
Other Non-Asphalt Surfaces	0.523110	0.057023	0.188851	0.138134	0.029446	0.007696	0.010914	0.006163	0.000818	0.000438	0.030081	0.001523	0.005803

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037
NaturalGas Unmitigated	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	267.889	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.8900e-003**	**0.0263**	**0.0221**	**1.6000e-004**		**2.0000e-003**	**2.0000e-003**		**2.0000e-003**	**2.0000e-003**		**31.5164**	**31.5164**	**6.0000e-004**	**5.8000e-004**	**31.7037**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0.267889	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.8900e-003**	**0.0263**	**0.0221**	**1.6000e-004**		**2.0000e-003**	**2.0000e-003**		**2.0000e-003**	**2.0000e-003**		**31.5164**	**31.5164**	**6.0000e-004**	**5.8000e-004**	**31.7037**

6.0 Area Detail

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1072	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003
Unmitigated	0.1072	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.1000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1010					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003
Total	**0.1072**	**0.0000**	**5.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.1700e-003**	**1.1700e-003**	**0.0000**		**1.2500e-003**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.1000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1010					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003
Total	**0.1072**	**0.0000**	**5.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.1700e-003**	**1.1700e-003**	**0.0000**		**1.2500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements

South Central Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	4.71	1000sqft	0.29	4,710.00	0
Other Non-Asphalt Surfaces	0.65	1000sqft	0.01	650.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Infrastructure improvements are assumed 10 percent of pipeline area. Total square feet = (900 sf booster pump station x 38,100 pipeline(.10)) = 4,710 sf. And 130 LF pipeline replaced at Rincon Pump Plant. 8,900 sf distrubance area for BPS-B.

Construction Phase - Construction Schedule adjusted to match applicant provided schedule.

Off-road Equipment - Used default construction equipment list.

Off-road Equipment - Based on project details, added off-highway trucks to default construction equipment list.

Off-road Equipment - Based on project details, added excavators to other default equipment list.

Off-road Equipment - Used default construction equipment list

Off-road Equipment - Used Default construction equipment

Trips and VMT - Trips based on information provided by the applicant.

Grading -

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating - Based on VCAPCD Rule 74.2 Architectural Coating

Vehicle Trips - 50 maintenance trips per year. Assume all primary C-C trips

Area Coating - Based on VCAPCD Rule 74.2 Architectural Coating

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on VCAPCD Rule 55

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	1.00	3.00
tblConstructionPhase	NumDays	2.00	7.00
tblConstructionPhase	NumDays	100.00	335.00
tblLandUse	LotAcreage	0.11	0.29
tblTripsAndVMT	VendorTripNumber	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	2.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblVehicleTrips	CC_TTP	28.00	100.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.99	0.00
tblVehicleTrips	SU_TR	5.00	0.00
tblVehicleTrips	WD_TR	4.96	0.05

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.1676	11.7489	10.6309	0.0253	5.3941	0.4963	5.8904	2.5903	0.4566	3.0470	0.0000	2,452.8149	2,452.8149	0.7735	2.1100e-003	2,472.7818
2024	1.1216	9.3209	10.5464	0.0253	0.0822	0.4026	0.4847	0.0218	0.3704	0.3922	0.0000	2,452.0590	2,452.0590	0.7735	1.9700e-003	2,471.9838
2025	5.7117	9.5280	12.4508	0.0289	0.1643	0.3960	0.5603	0.0436	0.3684	0.4120	0.0000	2,796.9710	2,796.9710	0.7906	3.6800e-003	2,817.8310
Maximum	**5.7117**	**11.7489**	**12.4508**	**0.0289**	**5.3941**	**0.4963**	**5.8904**	**2.5903**	**0.4566**	**3.0470**	**0.0000**	**2,796.9710**	**2,796.9710**	**0.7906**	**3.6800e-003**	**2,817.8310**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.1676	11.7489	10.6309	0.0253	2.4725	0.4963	2.9688	1.1776	0.4566	1.6343	0.0000	2,452.8148	2,452.8148	0.7735	2.1100e-003	2,472.7818
2024	1.1216	9.3209	10.5464	0.0253	0.0822	0.4026	0.4847	0.0218	0.3704	0.3922	0.0000	2,452.0590	2,452.0590	0.7735	1.9700e-003	2,471.9838
2025	5.7117	9.5280	12.4508	0.0289	0.1643	0.3960	0.5603	0.0436	0.3684	0.4120	0.0000	2,796.9710	2,796.9710	0.7906	3.6800e-003	2,817.8310
Maximum	**5.7117**	**11.7489**	**12.4508**	**0.0289**	**2.4725**	**0.4963**	**2.9688**	**1.1776**	**0.4566**	**1.6343**	**0.0000**	**2,796.9710**	**2,796.9710**	**0.7906**	**3.6800e-003**	**2,817.8310**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	51.80	0.00	42.13	53.19	0.00	36.68	0.00	0.00	0.00	0.00	0.00	0.00

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1072	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003
Energy	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037
Mobile	6.5000e-004	8.3000e-004	6.1200e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004		1.2201	1.2201	9.0000e-005	6.0000e-005	1.2405
Total	**0.1107**	**0.0271**	**0.0287**	**1.7000e-004**	**1.3200e-003**	**2.0100e-003**	**3.3300e-003**	**3.5000e-004**	**2.0100e-003**	**2.3600e-003**		**32.7376**	**32.7376**	**6.9000e-004**	**6.4000e-004**	**32.9454**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1072	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003
Energy	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037
Mobile	6.5000e-004	8.3000e-004	6.1200e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004		1.2201	1.2201	9.0000e-005	6.0000e-005	1.2405
Total	**0.1107**	**0.0271**	**0.0287**	**1.7000e-004**	**1.3200e-003**	**2.0100e-003**	**3.3300e-003**	**3.5000e-004**	**2.0100e-003**	**2.3600e-003**		**32.7376**	**32.7376**	**6.9000e-004**	**6.4000e-004**	**32.9454**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/27/2023	11/29/2023	5	3	
2	Grading	Grading	11/30/2023	12/8/2023	5	7	
3	Building Construction	Building Construction	12/11/2023	3/21/2025	5	335	
4	Architectural Coating	Architectural Coating	3/21/2025	3/27/2025	5	5	
5	Paving	Paving	3/24/2025	3/28/2025	5	5	

Acres of Grading (Site Preparation Phase): 1.5

Acres of Grading (Grading Phase): 5.25

Acres of Paving: 0.01

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,065; Non-Residential Outdoor: 2,355; Striped Parking Area: 39 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**		**942.4317**	**942.4317**	**0.3048**		**950.0517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0315	0.0214	0.2453	6.7000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		68.3175	68.3175	2.2700e-003	2.1100e-003	69.0046
Total	**0.0315**	**0.0214**	**0.2453**	**6.7000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**68.3175**	**68.3175**	**2.2700e-003**	**2.1100e-003**	**69.0046**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.2386**	**0.2266**	**0.4652**	**0.0258**	**0.2084**	**0.2342**	**0.0000**	**942.4317**	**942.4317**	**0.3048**		**950.0517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0315	0.0214	0.2453	6.7000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		68.3175	68.3175	2.2700e-003	2.1100e-003	69.0046
Total	**0.0315**	**0.0214**	**0.2453**	**6.7000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**68.3175**	**68.3175**	**2.2700e-003**	**2.1100e-003**	**69.0046**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	1.1222	11.7275	8.8094	0.0193		0.4959	0.4959		0.4562	0.4562		1,864.8770	1,864.8770	0.6031		1,879.9554
Total	**1.1222**	**11.7275**	**8.8094**	**0.0193**	**5.3119**	**0.4959**	**5.8078**	**2.5686**	**0.4562**	**3.0248**		**1,864.8770**	**1,864.8770**	**0.6031**		**1,879.9554**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0315	0.0214	0.2453	6.7000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		68.3175	68.3175	2.2700e-003	2.1100e-003	69.0046
Total	**0.0315**	**0.0214**	**0.2453**	**6.7000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**68.3175**	**68.3175**	**2.2700e-003**	**2.1100e-003**	**69.0046**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3904	0.0000	2.3904	1.1559	0.0000	1.1559			0.0000			0.0000
Off-Road	1.1222	11.7275	8.8094	0.0193		0.4959	0.4959		0.4562	0.4562	0.0000	1,864.8770	1,864.8770	0.6031		1,879.9554
Total	**1.1222**	**11.7275**	**8.8094**	**0.0193**	**2.3904**	**0.4959**	**2.8863**	**1.1559**	**0.4562**	**1.6121**	**0.0000**	**1,864.8770**	**1,864.8770**	**0.6031**		**1,879.9554**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0315	0.0214	0.2453	6.7000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		68.3175	68.3175	2.2700e-003	2.1100e-003	69.0046
Total	**0.0315**	**0.0214**	**0.2453**	**6.7000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**68.3175**	**68.3175**	**2.2700e-003**	**2.1100e-003**	**69.0046**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1361	9.9865	10.3855	0.0246		0.4493	0.4493		0.4133	0.4133		2,384.4974	2,384.4974	0.7712		2,403.7772
Total	**1.1361**	**9.9865**	**10.3855**	**0.0246**		**0.4493**	**0.4493**		**0.4133**	**0.4133**		**2,384.4974**	**2,384.4974**	**0.7712**		**2,403.7772**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0315	0.0214	0.2453	6.7000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		68.3175	68.3175	2.2700e-003	2.1100e-003	69.0046
Total	**0.0315**	**0.0214**	**0.2453**	**6.7000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**68.3175**	**68.3175**	**2.2700e-003**	**2.1100e-003**	**69.0046**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1361	9.9865	10.3855	0.0246		0.4493	0.4493		0.4133	0.4133	0.0000	2,384.4974	2,384.4974	0.7712		2,403.7772
Total	**1.1361**	**9.9865**	**10.3855**	**0.0246**		**0.4493**	**0.4493**		**0.4133**	**0.4133**	**0.0000**	**2,384.4974**	**2,384.4974**	**0.7712**		**2,403.7772**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0315	0.0214	0.2453	6.7000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		68.3175	68.3175	2.2700e-003	2.1100e-003	69.0046
Total	**0.0315**	**0.0214**	**0.2453**	**6.7000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**68.3175**	**68.3175**	**2.2700e-003**	**2.1100e-003**	**69.0046**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0921	9.3018	10.3177	0.0246		0.4022	0.4022		0.3700	0.3700		2,385.3338	2,385.3338	0.7715		2,404.6205
Total	**1.0921**	**9.3018**	**10.3177**	**0.0246**		**0.4022**	**0.4022**		**0.3700**	**0.3700**		**2,385.3338**	**2,385.3338**	**0.7715**		**2,404.6205**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0296	0.0192	0.2287	6.5000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		66.7252	66.7252	2.0700e-003	1.9700e-003	67.3633
Total	**0.0296**	**0.0192**	**0.2287**	**6.5000e-004**	**0.0822**	**4.0000e-004**	**0.0826**	**0.0218**	**3.7000e-004**	**0.0222**		**66.7252**	**66.7252**	**2.0700e-003**	**1.9700e-003**	**67.3633**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0921	9.3018	10.3177	0.0246		0.4022	0.4022		0.3700	0.3700	0.0000	2,385.3338	2,385.3338	0.7715		2,404.6205
Total	**1.0921**	**9.3018**	**10.3177**	**0.0246**		**0.4022**	**0.4022**		**0.3700**	**0.3700**	**0.0000**	**2,385.3338**	**2,385.3338**	**0.7715**		**2,404.6205**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0296	0.0192	0.2287	6.5000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		66.7252	66.7252	2.0700e-003	1.9700e-003	67.3633
Total	**0.0296**	**0.0192**	**0.2287**	**6.5000e-004**	**0.0822**	**4.0000e-004**	**0.0826**	**0.0218**	**3.7000e-004**	**0.0222**		**66.7252**	**66.7252**	**2.0700e-003**	**1.9700e-003**	**67.3633**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0286	8.3480	10.2137	0.0246		0.3437	0.3437		0.3162	0.3162		2,385.2465	2,385.2465	0.7714		2,404.5324
Total	**1.0286**	**8.3480**	**10.2137**	**0.0246**		**0.3437**	**0.3437**		**0.3162**	**0.3162**		**2,385.2465**	**2,385.2465**	**0.7714**		**2,404.5324**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0278	0.0172	0.2140	6.3000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		65.1382	65.1382	1.8800e-003	1.8400e-003	65.7334
Total	**0.0278**	**0.0172**	**0.2140**	**6.3000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**65.1382**	**65.1382**	**1.8800e-003**	**1.8400e-003**	**65.7334**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0286	8.3480	10.2137	0.0246		0.3437	0.3437		0.3162	0.3162	0.0000	2,385.2465	2,385.2465	0.7714		2,404.5324
Total	**1.0286**	**8.3480**	**10.2137**	**0.0246**		**0.3437**	**0.3437**		**0.3162**	**0.3162**	**0.0000**	**2,385.2465**	**2,385.2465**	**0.7714**		**2,404.5324**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0278	0.0172	0.2140	6.3000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		65.1382	65.1382	1.8800e-003	1.8400e-003	65.7334
Total	**0.0278**	**0.0172**	**0.2140**	**6.3000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**65.1382**	**65.1382**	**1.8800e-003**	**1.8400e-003**	**65.7334**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.4566					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**4.6274**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0278	0.0172	0.2140	6.3000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		65.1382	65.1382	1.8800e-003	1.8400e-003	65.7334
Total	**0.0278**	**0.0172**	**0.2140**	**6.3000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**65.1382**	**65.1382**	**1.8800e-003**	**1.8400e-003**	**65.7334**

3.5 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.4566					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**4.6274**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0278	0.0172	0.2140	6.3000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		65.1382	65.1382	1.8800e-003	1.8400e-003	65.7334
Total	**0.0278**	**0.0172**	**0.2140**	**6.3000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**65.1382**	**65.1382**	**1.8800e-003**	**1.8400e-003**	**65.7334**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5638	4.9206	7.0257	0.0113		0.2186	0.2186		0.2046	0.2046		1,036.2711	1,036.2711	0.3019		1,043.8179
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5638**	**4.9206**	**7.0257**	**0.0113**		**0.2186**	**0.2186**		**0.2046**	**0.2046**		**1,036.2711**	**1,036.2711**	**0.3019**		**1,043.8179**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0278	0.0172	0.2140	6.3000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		65.1382	65.1382	1.8800e-003	1.8400e-003	65.7334
Total	**0.0278**	**0.0172**	**0.2140**	**6.3000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**65.1382**	**65.1382**	**1.8800e-003**	**1.8400e-003**	**65.7334**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5638	4.9206	7.0257	0.0113		0.2186	0.2186		0.2046	0.2046	0.0000	1,036.2711	1,036.2711	0.3019		1,043.8179
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5638**	**4.9206**	**7.0257**	**0.0113**		**0.2186**	**0.2186**		**0.2046**	**0.2046**	**0.0000**	**1,036.2711**	**1,036.2711**	**0.3019**		**1,043.8179**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0278	0.0172	0.2140	6.3000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		65.1382	65.1382	1.8800e-003	1.8400e-003	65.7334
Total	**0.0278**	**0.0172**	**0.2140**	**6.3000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**65.1382**	**65.1382**	**1.8800e-003**	**1.8400e-003**	**65.7334**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.5000e-004	8.3000e-004	6.1200e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004		1.2201	1.2201	9.0000e-005	6.0000e-005	1.2405
Unmitigated	6.5000e-004	8.3000e-004	6.1200e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004		1.2201	1.2201	9.0000e-005	6.0000e-005	1.2405

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.24	0.00	0.00	447	447
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.24	0.00	0.00	447	447

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	0.00	100.00	0.00	100	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.523110	0.057023	0.188851	0.138134	0.029446	0.007696	0.010914	0.006163	0.000818	0.000438	0.030081	0.001523	0.005803
Other Non-Asphalt Surfaces	0.523110	0.057023	0.188851	0.138134	0.029446	0.007696	0.010914	0.006163	0.000818	0.000438	0.030081	0.001523	0.005803

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037
NaturalGas Unmitigated	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	267.889	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.8900e-003**	**0.0263**	**0.0221**	**1.6000e-004**		**2.0000e-003**	**2.0000e-003**		**2.0000e-003**	**2.0000e-003**		**31.5164**	**31.5164**	**6.0000e-004**	**5.8000e-004**	**31.7037**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0.267889	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.8900e-003**	**0.0263**	**0.0221**	**1.6000e-004**		**2.0000e-003**	**2.0000e-003**		**2.0000e-003**	**2.0000e-003**		**31.5164**	**31.5164**	**6.0000e-004**	**5.8000e-004**	**31.7037**

6.0 Area Detail

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1072	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003
Unmitigated	0.1072	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.1000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1010					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003
Total	**0.1072**	**0.0000**	**5.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.1700e-003**	**1.1700e-003**	**0.0000**		**1.2500e-003**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.1000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1010					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003
Total	**0.1072**	**0.0000**	**5.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.1700e-003**	**1.1700e-003**	**0.0000**		**1.2500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Pipeline - Mitigated

Ventura County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	38.10	1000sqft	0.87	38,100.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 7,100 LF of pipeline, and 520 LF of replacement pipeline and 5 foot wide trench. (7,620 feet x 5 feet = 38,100 feet squared)

Construction Phase - Adjusted construction schedule to meet applicant provided schedule

Off-road Equipment - Default construction equipment was used.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Trips and VMT - Information provided by the applicant

Grading - Data provided by the applicant

Architectural Coating -

Vehicle Trips -

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

Construction Off-road Equipment Mitigation - Per VCAPCD Rule 55. Implement Tier 4 mitigation.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	2286	2205
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	100.00	98.00
tblConstructionPhase	NumDays	2.00	38.00
tblConstructionPhase	NumDays	5.00	24.00
tblGrading	MaterialExported	0.00	2,900.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	77.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	16.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2342	2.0220	2.4525	5.2700e-003	0.1107	0.0911	0.2018	0.0535	0.0874	0.1408	0.0000	459.4913	459.4913	0.0912	2.5600e-003	462.5358
2024	5.4000e-003	0.0394	0.0552	9.0000e-005	9.4000e-004	1.8300e-003	2.7700e-003	2.5000e-004	1.7100e-003	1.9600e-003	0.0000	7.7580	7.7580	2.0700e-003	2.0000e-005	7.8151
Maximum	**0.2342**	**2.0220**	**2.4525**	**5.2700e-003**	**0.1107**	**0.0911**	**0.2018**	**0.0535**	**0.0874**	**0.1408**	**0.0000**	**459.4913**	**459.4913**	**0.0912**	**2.5600e-003**	**462.5358**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0615	0.3257	2.9820	5.2700e-003	0.0575	7.8200e-003	0.0654	0.0262	7.8100e-003	0.0340	0.0000	459.4908	459.4908	0.0912	2.5600e-003	462.5353
2024	1.8100e-003	3.8300e-003	0.0543	9.0000e-005	9.4000e-004	1.2000e-004	1.0600e-003	2.5000e-004	1.2000e-004	3.7000e-004	0.0000	7.7580	7.7580	2.0700e-003	2.0000e-005	7.8151
Maximum	**0.0615**	**0.3257**	**2.9820**	**5.2700e-003**	**0.0575**	**7.8200e-003**	**0.0654**	**0.0262**	**7.8100e-003**	**0.0340**	**0.0000**	**459.4908**	**459.4908**	**0.0912**	**2.5600e-003**	**462.5353**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**73.56**	**84.01**	**-21.08**	**0.00**	**47.62**	**91.46**	**67.53**	**50.86**	**91.10**	**75.96**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**6-12-2023**	**9-11-2023**	0.9228	0.1628
2	**9-12-2023**	**12-11-2023**	1.2107	0.2043
3	**12-12-2023**	**3-11-2024**	0.1629	0.0244
		Highest	1.2107	0.2043

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.0100e-003	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.8000e-004	6.8000e-004	0.0000	0.0000	7.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.0100e-003**	**0.0000**	**3.5000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**6.8000e-004**	**6.8000e-004**	**0.0000**	**0.0000**	**7.3000e-004**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.0100e-003	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.8000e-004	6.8000e-004	0.0000	0.0000	7.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.0100e-003**	**0.0000**	**3.5000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**6.8000e-004**	**6.8000e-004**	**0.0000**	**0.0000**	**7.3000e-004**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/12/2023	6/12/2023	5	1	
2	Excavation/Shoring	Grading	6/13/2023	8/3/2023	5	38	
3	Installation/Backfill	Building Construction	8/3/2023	12/18/2023	5	98	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Restoration	Paving	12/19/2023	1/19/2024	5	24	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 14.25

Acres of Paving: 0.87

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Excavation/Shoring	Bore/Drill Rigs	1	8.00	221	0.50
Excavation/Shoring	Concrete/Industrial Saws	1	8.00	81	0.73
Excavation/Shoring	Excavators	1	8.00	158	0.38
Excavation/Shoring	Graders	0	6.00	187	0.41
Excavation/Shoring	Off-Highway Trucks	1	8.00	402	0.38
Excavation/Shoring	Rubber Tired Dozers	1	6.00	247	0.40
Excavation/Shoring	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Installation/Backfill	Bore/Drill Rigs	1	8.00	221	0.50
Installation/Backfill	Cranes	1	4.00	231	0.29
Installation/Backfill	Excavators	1	8.00	158	0.38
Installation/Backfill	Forklifts	2	6.00	89	0.20
Installation/Backfill	Generator Sets	1	24.00	84	0.74
Installation/Backfill	Off-Highway Trucks	1	8.00	402	0.38
Installation/Backfill	Pumps	1	24.00	84	0.74
Installation/Backfill	Rollers	1	8.00	80	0.38

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Installation/Backfill	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Installation/Backfill	Welders	1	8.00	46	0.45
Restoration	Cement and Mortar Mixers	4	6.00	9	0.56
Restoration	Pavers	1	7.00	130	0.42
Restoration	Rollers	1	7.00	80	0.38
Restoration	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Excavation/Shoring	7	10.00	0.00	287.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Installation/Backfill	12	10.00	6.00	77.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration	7	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.2800e-003	0.0000	3.2800e-003	1.6800e-003	0.0000	1.6800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6000e-004	6.3900e-003	5.6100e-003	1.0000e-005		3.0000e-004	3.0000e-004		2.8000e-004	2.8000e-004	0.0000	0.9175	0.9175	2.2000e-004	0.0000	0.9231
Total	**6.6000e-004**	**6.3900e-003**	**5.6100e-003**	**1.0000e-005**	**3.2800e-003**	**3.0000e-004**	**3.5800e-003**	**1.6800e-003**	**2.8000e-004**	**1.9600e-003**	**0.0000**	**0.9175**	**0.9175**	**2.2000e-004**	**0.0000**	**0.9231**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0483	0.0483	0.0000	0.0000	0.0487
Total	**2.0000e-005**	**1.0000e-005**	**1.8000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0483**	**0.0483**	**0.0000**	**0.0000**	**0.0487**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.4700e-003	0.0000	1.4700e-003	7.6000e-004	0.0000	7.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2000e-004	5.3000e-004	6.1900e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.9175	0.9175	2.2000e-004	0.0000	0.9231
Total	**1.2000e-004**	**5.3000e-004**	**6.1900e-003**	**1.0000e-005**	**1.4700e-003**	**2.0000e-005**	**1.4900e-003**	**7.6000e-004**	**2.0000e-005**	**7.8000e-004**	**0.0000**	**0.9175**	**0.9175**	**2.2000e-004**	**0.0000**	**0.9231**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0483	0.0483	0.0000	0.0000	0.0487
Total	**2.0000e-005**	**1.0000e-005**	**1.8000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0483**	**0.0483**	**0.0000**	**0.0000**	**0.0487**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation/Shoring - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0934	0.0000	0.0934	0.0480	0.0000	0.0480	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0384	0.3377	0.3510	8.7000e-004		0.0147	0.0147		0.0137	0.0137	0.0000	76.4624	76.4624	0.0219	0.0000	77.0106
Total	**0.0384**	**0.3377**	**0.3510**	**8.7000e-004**	**0.0934**	**0.0147**	**0.1081**	**0.0480**	**0.0137**	**0.0617**	**0.0000**	**76.4624**	**76.4624**	**0.0219**	**0.0000**	**77.0106**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	0.0180	4.9300e-003	8.0000e-005	2.4600e-003	1.3000e-004	2.5900e-003	6.8000e-004	1.2000e-004	8.0000e-004	0.0000	8.1511	8.1511	5.5000e-004	1.3000e-003	8.5519
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.1000e-004	5.4000e-004	6.7800e-003	2.0000e-005	2.3800e-003	1.0000e-005	2.3900e-003	6.3000e-004	1.0000e-005	6.4000e-004	0.0000	1.8346	1.8346	5.0000e-005	5.0000e-005	1.8502
Total	**9.9000e-004**	**0.0185**	**0.0117**	**1.0000e-004**	**4.8400e-003**	**1.4000e-004**	**4.9800e-003**	**1.3100e-003**	**1.3000e-004**	**1.4400e-003**	**0.0000**	**9.9857**	**9.9857**	**6.0000e-004**	**1.3500e-003**	**10.4020**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation/Shoring - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0420	0.0000	0.0420	0.0216	0.0000	0.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0104	0.0453	0.4743	8.7000e-004		1.3900e-003	1.3900e-003		1.3900e-003	1.3900e-003	0.0000	76.4623	76.4623	0.0219	0.0000	77.0105
Total	**0.0104**	**0.0453**	**0.4743**	**8.7000e-004**	**0.0420**	**1.3900e-003**	**0.0434**	**0.0216**	**1.3900e-003**	**0.0230**	**0.0000**	**76.4623**	**76.4623**	**0.0219**	**0.0000**	**77.0105**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	0.0180	4.9300e-003	8.0000e-005	2.4600e-003	1.3000e-004	2.5900e-003	6.8000e-004	1.2000e-004	8.0000e-004	0.0000	8.1511	8.1511	5.5000e-004	1.3000e-003	8.5519
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.1000e-004	5.4000e-004	6.7800e-003	2.0000e-005	2.3800e-003	1.0000e-005	2.3900e-003	6.3000e-004	1.0000e-005	6.4000e-004	0.0000	1.8346	1.8346	5.0000e-005	5.0000e-005	1.8502
Total	**9.9000e-004**	**0.0185**	**0.0117**	**1.0000e-004**	**4.8400e-003**	**1.4000e-004**	**4.9800e-003**	**1.3100e-003**	**1.3000e-004**	**1.4400e-003**	**0.0000**	**9.9857**	**9.9857**	**6.0000e-004**	**1.3500e-003**	**10.4020**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1886	1.6175	2.0281	4.1100e-003		0.0747	0.0747		0.0720	0.0720	0.0000	355.6075	355.6075	0.0668	0.0000	357.2762
Total	**0.1886**	**1.6175**	**2.0281**	**4.1100e-003**		**0.0747**	**0.0747**		**0.0720**	**0.0720**	**0.0000**	**355.6075**	**355.6075**	**0.0668**	**0.0000**	**357.2762**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	4.8100e-003	1.3200e-003	2.0000e-005	6.6000e-004	3.0000e-005	7.0000e-004	1.8000e-004	3.0000e-005	2.1000e-004	0.0000	2.1869	2.1869	1.5000e-004	3.5000e-004	2.2944
Vendor	2.7000e-004	0.0108	3.8700e-003	5.0000e-005	1.7700e-003	6.0000e-005	1.8300e-003	5.1000e-004	6.0000e-005	5.7000e-004	0.0000	4.8875	4.8875	2.0000e-004	7.3000e-004	5.1106
Worker	1.8400e-003	1.3900e-003	0.0175	5.0000e-005	6.1400e-003	3.0000e-005	6.1800e-003	1.6300e-003	3.0000e-005	1.6600e-003	0.0000	4.7314	4.7314	1.2000e-004	1.2000e-004	4.7715
Total	**2.1900e-003**	**0.0170**	**0.0227**	**1.2000e-004**	**8.5700e-003**	**1.2000e-004**	**8.7100e-003**	**2.3200e-003**	**1.2000e-004**	**2.4400e-003**	**0.0000**	**11.8057**	**11.8057**	**4.7000e-004**	**1.2000e-003**	**12.1766**

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3.4 Installation/Backfill - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0467	0.2421	2.4342	4.1100e-003		6.0800e-003	6.0800e-003		6.0800e-003	6.0800e-003	0.0000	355.6071	355.6071	0.0668	0.0000	357.2757
Total	**0.0467**	**0.2421**	**2.4342**	**4.1100e-003**		**6.0800e-003**	**6.0800e-003**		**6.0800e-003**	**6.0800e-003**	**0.0000**	**355.6071**	**355.6071**	**0.0668**	**0.0000**	**357.2757**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	4.8100e-003	1.3200e-003	2.0000e-005	6.6000e-004	3.0000e-005	7.0000e-004	1.8000e-004	3.0000e-005	2.1000e-004	0.0000	2.1869	2.1869	1.5000e-004	3.5000e-004	2.2944
Vendor	2.7000e-004	0.0108	3.8700e-003	5.0000e-005	1.7700e-003	6.0000e-005	1.8300e-003	5.1000e-004	6.0000e-005	5.7000e-004	0.0000	4.8875	4.8875	2.0000e-004	7.3000e-004	5.1106
Worker	1.8400e-003	1.3900e-003	0.0175	5.0000e-005	6.1400e-003	3.0000e-005	6.1800e-003	1.6300e-003	3.0000e-005	1.6600e-003	0.0000	4.7314	4.7314	1.2000e-004	1.2000e-004	4.7715
Total	**2.1900e-003**	**0.0170**	**0.0227**	**1.2000e-004**	**8.5700e-003**	**1.2000e-004**	**8.7100e-003**	**2.3200e-003**	**1.2000e-004**	**2.4400e-003**	**0.0000**	**11.8057**	**11.8057**	**4.7000e-004**	**1.2000e-003**	**12.1766**

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3.5 Restoration - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.7500e-003	0.0248	0.0316	5.0000e-005		1.1900e-003	1.1900e-003		1.1100e-003	1.1100e-003	0.0000	4.2297	4.2297	1.2300e-003	0.0000	4.2605
Paving	4.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.1800e-003**	**0.0248**	**0.0316**	**5.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**4.2297**	**4.2297**	**1.2300e-003**	**0.0000**	**4.2605**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.3000e-004	1.6100e-003	0.0000	5.6000e-004	0.0000	5.7000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4345	0.4345	1.0000e-005	1.0000e-005	0.4382
Total	**1.7000e-004**	**1.3000e-004**	**1.6100e-003**	**0.0000**	**5.6000e-004**	**0.0000**	**5.7000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4345**	**0.4345**	**1.0000e-005**	**1.0000e-005**	**0.4382**

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3.5 Restoration - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.0000e-004	2.1800e-003	0.0311	5.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	4.2297	4.2297	1.2300e-003	0.0000	4.2605
Paving	4.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.3000e-004**	**2.1800e-003**	**0.0311**	**5.0000e-005**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**4.2297**	**4.2297**	**1.2300e-003**	**0.0000**	**4.2605**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.3000e-004	1.6100e-003	0.0000	5.6000e-004	0.0000	5.7000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4345	0.4345	1.0000e-005	1.0000e-005	0.4382
Total	**1.7000e-004**	**1.3000e-004**	**1.6100e-003**	**0.0000**	**5.6000e-004**	**0.0000**	**5.7000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4345**	**0.4345**	**1.0000e-005**	**1.0000e-005**	**0.4382**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4300e-003	0.0392	0.0527	8.0000e-005		1.8200e-003	1.8200e-003		1.7000e-003	1.7000e-003	0.0000	7.0505	7.0505	2.0500e-003	0.0000	7.1018
Paving	7.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.1400e-003**	**0.0392**	**0.0527**	**8.0000e-005**		**1.8200e-003**	**1.8200e-003**		**1.7000e-003**	**1.7000e-003**	**0.0000**	**7.0505**	**7.0505**	**2.0500e-003**	**0.0000**	**7.1018**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.9000e-004	2.4900e-003	1.0000e-005	9.4000e-004	0.0000	9.5000e-004	2.5000e-004	0.0000	2.5000e-004	0.0000	0.7076	0.7076	2.0000e-005	2.0000e-005	0.7133
Total	**2.6000e-004**	**1.9000e-004**	**2.4900e-003**	**1.0000e-005**	**9.4000e-004**	**0.0000**	**9.5000e-004**	**2.5000e-004**	**0.0000**	**2.5000e-004**	**0.0000**	**0.7076**	**0.7076**	**2.0000e-005**	**2.0000e-005**	**0.7133**

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3.5 Restoration - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.4000e-004	3.6400e-003	0.0518	8.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	7.0504	7.0504	2.0500e-003	0.0000	7.1018
Paving	7.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.5500e-003**	**3.6400e-003**	**0.0518**	**8.0000e-005**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**	**0.0000**	**7.0504**	**7.0504**	**2.0500e-003**	**0.0000**	**7.1018**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.9000e-004	2.4900e-003	1.0000e-005	9.4000e-004	0.0000	9.5000e-004	2.5000e-004	0.0000	2.5000e-004	0.0000	0.7076	0.7076	2.0000e-005	2.0000e-005	0.7133
Total	**2.6000e-004**	**1.9000e-004**	**2.4900e-003**	**1.0000e-005**	**9.4000e-004**	**0.0000**	**9.5000e-004**	**2.5000e-004**	**0.0000**	**2.5000e-004**	**0.0000**	**0.7076**	**0.7076**	**2.0000e-005**	**2.0000e-005**	**0.7133**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.548670	0.058343	0.171689	0.130773	0.027316	0.007545	0.011806	0.006161	0.000681	0.000392	0.029028	0.000637	0.006958

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.0100e-003	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.8000e-004	6.8000e-004	0.0000	0.0000	7.3000e-004
Unmitigated	3.0100e-003	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.8000e-004	6.8000e-004	0.0000	0.0000	7.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.8000e-004	6.8000e-004	0.0000	0.0000	7.3000e-004
Total	**3.0000e-003**	**0.0000**	**3.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**6.8000e-004**	**6.8000e-004**	**0.0000**	**0.0000**	**7.3000e-004**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.8000e-004	6.8000e-004	0.0000	0.0000	7.3000e-004
Total	**3.0000e-003**	**0.0000**	**3.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**6.8000e-004**	**6.8000e-004**	**0.0000**	**0.0000**	**7.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Pipeline - Mitigated

Ventura County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	38.10	1000sqft	0.87	38,100.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 7,100 LF of pipeline, and 520 LF of replacement pipeline and 5 foot wide trench. (7,620 feet x 5 feet = 38,100 feet squared)

Construction Phase - Adjusted construction schedule to meet applicant provided schedule

Off-road Equipment - Default construction equipment was used.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Trips and VMT - Information provided by the applicant

Grading - Data provided by the applicant

Architectural Coating -

Vehicle Trips -

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

Construction Off-road Equipment Mitigation - Per VCAPCD Rule 55. Implement Tier 4 mitigation.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	2286	2205
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	100.00	98.00
tblConstructionPhase	NumDays	2.00	38.00
tblConstructionPhase	NumDays	5.00	24.00
tblGrading	MaterialExported	0.00	2,900.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	77.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	16.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.9657	52.0464	60.9727	0.1377	6.6801	2.3066	7.6586	3.4014	2.2002	4.8440	0.0000	13,288.6483	13,288.6483	2.8191	0.1048	13,390.3392
2024	0.7201	5.2521	7.3796	0.0123	0.1277	0.2435	0.3712	0.0339	0.2274	0.2613	0.0000	1,144.1998	1,144.1998	0.3042	2.4100e-003	1,152.5222
Maximum	**5.9657**	**52.0464**	**60.9727**	**0.1377**	**6.6801**	**2.3066**	**7.6586**	**3.4014**	**2.2002**	**4.8440**	**0.0000**	**13,288.6483**	**13,288.6483**	**2.8191**	**0.1048**	**13,390.3392**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.5989	8.5855	75.7545	0.1377	3.0763	0.2073	3.1094	1.5492	0.2068	1.5823	0.0000	13,288.6483	13,288.6483	2.8191	0.1048	13,390.3392
2024	0.2417	0.5074	7.2510	0.0123	0.1277	0.0156	0.1433	0.0339	0.0155	0.0494	0.0000	1,144.1998	1,144.1998	0.3042	2.4100e-003	1,152.5222
Maximum	**1.5989**	**8.5855**	**75.7545**	**0.1377**	**3.0763**	**0.2073**	**3.1094**	**1.5492**	**0.2068**	**1.5823**	**0.0000**	**13,288.6483**	**13,288.6483**	**2.8191**	**0.1048**	**13,390.3392**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	72.47	84.13	-21.44	0.00	52.94	91.26	59.49	53.92	90.84	68.04	0.00	0.00	0.00	0.00	0.00	0.00

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0167	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0167**	**4.0000e-005**	**3.8800e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**		**8.3400e-003**	**8.3400e-003**	**2.0000e-005**	**0.0000**	**8.8800e-003**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0167	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0167**	**4.0000e-005**	**3.8800e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**		**8.3400e-003**	**8.3400e-003**	**2.0000e-005**	**0.0000**	**8.8800e-003**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/12/2023	6/12/2023	5	1	
2	Excavation/Shoring	Grading	6/13/2023	8/3/2023	5	38	
3	Installation/Backfill	Building Construction	8/3/2023	12/18/2023	5	98	
4	Restoration	Paving	12/19/2023	1/19/2024	5	24	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 14.25

Acres of Paving: 0.87

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Excavation/Shoring	Bore/Drill Rigs	1	8.00	221	0.50
Excavation/Shoring	Concrete/Industrial Saws	1	8.00	81	0.73
Excavation/Shoring	Excavators	1	8.00	158	0.38

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Excavation/Shoring	Graders	0	6.00	187	0.41
Excavation/Shoring	Off-Highway Trucks	1	8.00	402	0.38
Excavation/Shoring	Rubber Tired Dozers	1	6.00	247	0.40
Excavation/Shoring	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Installation/Backfill	Bore/Drill Rigs	1	8.00	221	0.50
Installation/Backfill	Cranes	1	4.00	231	0.29
Installation/Backfill	Excavators	1	8.00	158	0.38
Installation/Backfill	Forklifts	2	6.00	89	0.20
Installation/Backfill	Generator Sets	1	24.00	84	0.74
Installation/Backfill	Off-Highway Trucks	1	8.00	402	0.38
Installation/Backfill	Pumps	1	24.00	84	0.74
Installation/Backfill	Rollers	1	8.00	80	0.38
Installation/Backfill	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Installation/Backfill	Welders	1	8.00	46	0.45
Restoration	Cement and Mortar Mixers	4	6.00	9	0.56
Restoration	Pavers	1	7.00	130	0.42
Restoration	Rollers	1	7.00	80	0.38
Restoration	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Excavation/Shoring	7	10.00	0.00	287.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Installation/Backfill	12	10.00	6.00	77.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration	7	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.3211	12.7828	11.2264	0.0210		0.6008	0.6008		0.5630	0.5630		2,022.8194	2,022.8194	0.4917		2,035.1129
Total	**1.3211**	**12.7828**	**11.2264**	**0.0210**	**6.5523**	**0.6008**	**7.1532**	**3.3675**	**0.5630**	**3.9305**		**2,022.8194**	**2,022.8194**	**0.4917**		**2,035.1129**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0372	0.0250	0.3744	1.0800e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		110.5038	110.5038	2.6100e-003	2.5900e-003	111.3394
Total	**0.0372**	**0.0250**	**0.3744**	**1.0800e-003**	**0.1277**	**6.7000e-004**	**0.1284**	**0.0339**	**6.1000e-004**	**0.0345**		**110.5038**	**110.5038**	**2.6100e-003**	**2.5900e-003**	**111.3394**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	0.2431	1.0534	12.3764	0.0210		0.0324	0.0324		0.0324	0.0324	0.0000	2,022.8194	2,022.8194	0.4917		2,035.1129
Total	**0.2431**	**1.0534**	**12.3764**	**0.0210**	**2.9486**	**0.0324**	**2.9810**	**1.5154**	**0.0324**	**1.5478**	**0.0000**	**2,022.8194**	**2,022.8194**	**0.4917**		**2,035.1129**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0372	0.0250	0.3744	1.0800e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		110.5038	110.5038	2.6100e-003	2.5900e-003	111.3394
Total	**0.0372**	**0.0250**	**0.3744**	**1.0800e-003**	**0.1277**	**6.7000e-004**	**0.1284**	**0.0339**	**6.1000e-004**	**0.0345**		**110.5038**	**110.5038**	**2.6100e-003**	**2.5900e-003**	**111.3394**

3.3 Excavation/Shoring - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	2.0198	17.7731	18.4711	0.0460		0.7725	0.7725		0.7210	0.7210		4,436.0725	4,436.0725	1.2722		4,467.8784
Total	**2.0198**	**17.7731**	**18.4711**	**0.0460**	**4.9143**	**0.7725**	**5.6867**	**2.5256**	**0.7210**	**3.2466**		**4,436.0725**	**4,436.0725**	**1.2722**		**4,467.8784**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation/Shoring - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0152	0.9062	0.2580	4.2600e-003	0.1319	6.6700e-003	0.1385	0.0361	6.3800e-003	0.0425		472.7155	472.7155	0.0322	0.0753	495.9580
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0372	0.0250	0.3744	1.0800e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		110.5038	110.5038	2.6100e-003	2.5900e-003	111.3394
Total	**0.0524**	**0.9312**	**0.6324**	**5.3400e-003**	**0.2596**	**7.3400e-003**	**0.2669**	**0.0700**	**6.9900e-003**	**0.0770**		**583.2193**	**583.2193**	**0.0348**	**0.0779**	**607.2974**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2114	0.0000	2.2114	1.1365	0.0000	1.1365			0.0000			0.0000
Off-Road	0.5496	2.3815	24.9653	0.0460		0.0733	0.0733		0.0733	0.0733	0.0000	4,436.0725	4,436.0725	1.2722		4,467.8784
Total	**0.5496**	**2.3815**	**24.9653**	**0.0460**	**2.2114**	**0.0733**	**2.2847**	**1.1365**	**0.0733**	**1.2098**	**0.0000**	**4,436.0725**	**4,436.0725**	**1.2722**		**4,467.8784**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation/Shoring - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0152	0.9062	0.2580	4.2600e-003	0.1319	6.6700e-003	0.1385	0.0361	6.3800e-003	0.0425		472.7155	472.7155	0.0322	0.0753	495.9580
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0372	0.0250	0.3744	1.0800e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		110.5038	110.5038	2.6100e-003	2.5900e-003	111.3394
Total	**0.0524**	**0.9312**	**0.6324**	**5.3400e-003**	**0.2596**	**7.3400e-003**	**0.2669**	**0.0700**	**6.9900e-003**	**0.0770**		**583.2193**	**583.2193**	**0.0348**	**0.0779**	**607.2974**

3.4 Installation/Backfill - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.8491	33.0106	41.3903	0.0839		1.5242	1.5242		1.4698	1.4698		7,999.7991	7,999.7991	1.5016		8,037.3379
Total	**3.8491**	**33.0106**	**41.3903**	**0.0839**		**1.5242**	**1.5242**		**1.4698**	**1.4698**		**7,999.7991**	**7,999.7991**	**1.5016**		**8,037.3379**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5900e-003	0.0943	0.0268	4.4000e-004	0.0137	6.9000e-004	0.0144	3.7600e-003	6.6000e-004	4.4200e-003		49.1775	49.1775	3.3500e-003	7.8300e-003	51.5954
Vendor	5.7200e-003	0.2121	0.0777	1.0100e-003	0.0367	1.2300e-003	0.0380	0.0106	1.1700e-003	0.0117		109.8762	109.8762	4.5200e-003	0.0165	114.8908
Worker	0.0372	0.0250	0.3744	1.0800e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		110.5038	110.5038	2.6100e-003	2.5900e-003	111.3394
Total	**0.0445**	**0.3314**	**0.4790**	**2.5300e-003**	**0.1782**	**2.5900e-003**	**0.1808**	**0.0482**	**2.4400e-003**	**0.0507**		**269.5575**	**269.5575**	**0.0105**	**0.0269**	**277.8256**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9524	4.9414	49.6779	0.0839		0.1241	0.1241		0.1241	0.1241	0.0000	7,999.7991	7,999.7991	1.5016		8,037.3379
Total	**0.9524**	**4.9414**	**49.6779**	**0.0839**		**0.1241**	**0.1241**		**0.1241**	**0.1241**	**0.0000**	**7,999.7991**	**7,999.7991**	**1.5016**		**8,037.3379**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5900e-003	0.0943	0.0268	4.4000e-004	0.0137	6.9000e-004	0.0144	3.7600e-003	6.6000e-004	4.4200e-003		49.1775	49.1775	3.3500e-003	7.8300e-003	51.5954
Vendor	5.7200e-003	0.2121	0.0777	1.0100e-003	0.0367	1.2300e-003	0.0380	0.0106	1.1700e-003	0.0117		109.8762	109.8762	4.5200e-003	0.0165	114.8908
Worker	0.0372	0.0250	0.3744	1.0800e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		110.5038	110.5038	2.6100e-003	2.5900e-003	111.3394
Total	**0.0445**	**0.3314**	**0.4790**	**2.5300e-003**	**0.1782**	**2.5900e-003**	**0.1808**	**0.0482**	**2.4400e-003**	**0.0507**		**269.5575**	**269.5575**	**0.0105**	**0.0269**	**277.8256**

3.5 Restoration - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7061**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**		**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0372	0.0250	0.3744	1.0800e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		110.5038	110.5038	2.6100e-003	2.5900e-003	111.3394
Total	**0.0372**	**0.0250**	**0.3744**	**1.0800e-003**	**0.1277**	**6.7000e-004**	**0.1284**	**0.0339**	**6.1000e-004**	**0.0345**		**110.5038**	**110.5038**	**2.6100e-003**	**2.5900e-003**	**111.3394**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1119	0.4851	6.9028	0.0113		0.0149	0.0149		0.0149	0.0149	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2069**	**0.4851**	**6.9028**	**0.0113**		**0.0149**	**0.0149**		**0.0149**	**0.0149**	**0.0000**	**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0372	0.0250	0.3744	1.0800e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		110.5038	110.5038	2.6100e-003	2.5900e-003	111.3394
Total	**0.0372**	**0.0250**	**0.3744**	**1.0800e-003**	**0.1277**	**6.7000e-004**	**0.1284**	**0.0339**	**6.1000e-004**	**0.0345**		**110.5038**	**110.5038**	**2.6100e-003**	**2.5900e-003**	**111.3394**

3.5 Restoration - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269		1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6853**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**		**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0348	0.0224	0.3482	1.0500e-003	0.1277	6.4000e-004	0.1284	0.0339	5.9000e-004	0.0345		107.9606	107.9606	2.3700e-003	2.4100e-003	108.7364
Total	**0.0348**	**0.0224**	**0.3482**	**1.0500e-003**	**0.1277**	**6.4000e-004**	**0.1284**	**0.0339**	**5.9000e-004**	**0.0345**		**107.9606**	**107.9606**	**2.3700e-003**	**2.4100e-003**	**108.7364**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1119	0.4851	6.9028	0.0113		0.0149	0.0149		0.0149	0.0149	0.0000	1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2069**	**0.4851**	**6.9028**	**0.0113**		**0.0149**	**0.0149**		**0.0149**	**0.0149**	**0.0000**	**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0348	0.0224	0.3482	1.0500e-003	0.1277	6.4000e-004	0.1284	0.0339	5.9000e-004	0.0345		107.9606	107.9606	2.3700e-003	2.4100e-003	108.7364
Total	**0.0348**	**0.0224**	**0.3482**	**1.0500e-003**	**0.1277**	**6.4000e-004**	**0.1284**	**0.0339**	**5.9000e-004**	**0.0345**		**107.9606**	**107.9606**	**2.3700e-003**	**2.4100e-003**	**108.7364**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.548670	0.058343	0.171689	0.130773	0.027316	0.007545	0.011806	0.006161	0.000681	0.000392	0.029028	0.000637	0.006958

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0167	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003
Unmitigated	0.0167	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.8000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0135					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.6000e-004	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003
Total	**0.0167**	**4.0000e-005**	**3.8800e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**8.3400e-003**	**8.3400e-003**	**2.0000e-005**		**8.8800e-003**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.8000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0135					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.6000e-004	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003
Total	**0.0167**	**4.0000e-005**	**3.8800e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**8.3400e-003**	**8.3400e-003**	**2.0000e-005**		**8.8800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Pipeline - Mitigated

Ventura County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	38.10	1000sqft	0.87	38,100.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 7,100 LF of pipeline, and 520 LF of replacement pipeline and 5 foot wide trench. (7,620 feet x 5 feet = 38,100 feet squared)

Construction Phase - Adjusted construction schedule to meet applicant provided schedule

Off-road Equipment - Default construction equipment was used.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Off-road Equipment - Based on information from the applicant and reflect realistic equipment.

Trips and VMT - Information provided by the applicant

Grading - Data provided by the applicant

Architectural Coating -

Vehicle Trips -

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

Construction Off-road Equipment Mitigation - Per VCAPCD Rule 55. Implement Tier 4 mitigation.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	2286	2205
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	100.00	98.00
tblConstructionPhase	NumDays	2.00	38.00
tblConstructionPhase	NumDays	5.00	24.00
tblGrading	MaterialExported	0.00	2,900.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	77.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	16.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.9730	52.1069	60.9475	0.1376	6.6801	2.3066	7.6586	3.4014	2.2002	4.8440	0.0000	13,279.6391	13,279.6391	2.8193	0.1054	13,381.5418
2024	0.7242	5.2559	7.3653	0.0123	0.1277	0.2435	0.3712	0.0339	0.2274	0.2613	0.0000	1,139.4905	1,139.4905	0.3044	2.6700e-003	1,147.8957
Maximum	**5.9730**	**52.1069**	**60.9475**	**0.1376**	**6.6801**	**2.3066**	**7.6586**	**3.4014**	**2.2002**	**4.8440**	**0.0000**	**13,279.6391**	**13,279.6391**	**2.8193**	**0.1054**	**13,381.5418**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.6061	8.6460	75.7294	0.1376	3.0763	0.2073	3.1094	1.5492	0.2068	1.5823	0.0000	13,279.6391	13,279.6391	2.8193	0.1054	13,381.5418
2024	0.2457	0.5113	7.2367	0.0123	0.1277	0.0156	0.1433	0.0339	0.0155	0.0494	0.0000	1,139.4905	1,139.4905	0.3044	2.6700e-003	1,147.8957
Maximum	**1.6061**	**8.6460**	**75.7294**	**0.1376**	**3.0763**	**0.2073**	**3.1094**	**1.5492**	**0.2068**	**1.5823**	**0.0000**	**13,279.6391**	**13,279.6391**	**2.8193**	**0.1054**	**13,381.5418**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	72.35	84.04	-21.45	0.00	52.94	91.26	59.49	53.92	90.84	68.04	0.00	0.00	0.00	0.00	0.00	0.00

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0167	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0167**	**4.0000e-005**	**3.8800e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**		**8.3400e-003**	**8.3400e-003**	**2.0000e-005**	**0.0000**	**8.8800e-003**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0167	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0167**	**4.0000e-005**	**3.8800e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**		**8.3400e-003**	**8.3400e-003**	**2.0000e-005**	**0.0000**	**8.8800e-003**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/12/2023	6/12/2023	5	1	
2	Excavation/Shoring	Grading	6/13/2023	8/3/2023	5	38	
3	Installation/Backfill	Building Construction	8/3/2023	12/18/2023	5	98	
4	Restoration	Paving	12/19/2023	1/19/2024	5	24	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 14.25

Acres of Paving: 0.87

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Excavation/Shoring	Bore/Drill Rigs	1	8.00	221	0.50
Excavation/Shoring	Concrete/Industrial Saws	1	8.00	81	0.73
Excavation/Shoring	Excavators	1	8.00	158	0.38

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Excavation/Shoring	Graders	0	6.00	187	0.41
Excavation/Shoring	Off-Highway Trucks	1	8.00	402	0.38
Excavation/Shoring	Rubber Tired Dozers	1	6.00	247	0.40
Excavation/Shoring	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Installation/Backfill	Bore/Drill Rigs	1	8.00	221	0.50
Installation/Backfill	Cranes	1	4.00	231	0.29
Installation/Backfill	Excavators	1	8.00	158	0.38
Installation/Backfill	Forklifts	2	6.00	89	0.20
Installation/Backfill	Generator Sets	1	24.00	84	0.74
Installation/Backfill	Off-Highway Trucks	1	8.00	402	0.38
Installation/Backfill	Pumps	1	24.00	84	0.74
Installation/Backfill	Rollers	1	8.00	80	0.38
Installation/Backfill	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Installation/Backfill	Welders	1	8.00	46	0.45
Restoration	Cement and Mortar Mixers	4	6.00	9	0.56
Restoration	Pavers	1	7.00	130	0.42
Restoration	Rollers	1	7.00	80	0.38
Restoration	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Excavation/Shoring	7	10.00	0.00	287.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Installation/Backfill	12	10.00	6.00	77.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration	7	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.3211	12.7828	11.2264	0.0210		0.6008	0.6008		0.5630	0.5630		2,022.8194	2,022.8194	0.4917		2,035.1129
Total	**1.3211**	**12.7828**	**11.2264**	**0.0210**	**6.5523**	**0.6008**	**7.1532**	**3.3675**	**0.5630**	**3.9305**		**2,022.8194**	**2,022.8194**	**0.4917**		**2,035.1129**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0414	0.0293	0.3586	1.0300e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		105.6747	105.6747	2.7500e-003	2.8700e-003	106.5997
Total	**0.0414**	**0.0293**	**0.3586**	**1.0300e-003**	**0.1277**	**6.7000e-004**	**0.1284**	**0.0339**	**6.1000e-004**	**0.0345**		**105.6747**	**105.6747**	**2.7500e-003**	**2.8700e-003**	**106.5997**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	0.2431	1.0534	12.3764	0.0210		0.0324	0.0324		0.0324	0.0324	0.0000	2,022.8194	2,022.8194	0.4917		2,035.1129
Total	**0.2431**	**1.0534**	**12.3764**	**0.0210**	**2.9486**	**0.0324**	**2.9810**	**1.5154**	**0.0324**	**1.5478**	**0.0000**	**2,022.8194**	**2,022.8194**	**0.4917**		**2,035.1129**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0414	0.0293	0.3586	1.0300e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		105.6747	105.6747	2.7500e-003	2.8700e-003	106.5997
Total	**0.0414**	**0.0293**	**0.3586**	**1.0300e-003**	**0.1277**	**6.7000e-004**	**0.1284**	**0.0339**	**6.1000e-004**	**0.0345**		**105.6747**	**105.6747**	**2.7500e-003**	**2.8700e-003**	**106.5997**

3.3 Excavation/Shoring - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	2.0198	17.7731	18.4711	0.0460		0.7725	0.7725		0.7210	0.7210		4,436.0725	4,436.0725	1.2722		4,467.8784
Total	**2.0198**	**17.7731**	**18.4711**	**0.0460**	**4.9143**	**0.7725**	**5.6867**	**2.5256**	**0.7210**	**3.2466**		**4,436.0725**	**4,436.0725**	**1.2722**		**4,467.8784**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation/Shoring - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0143	0.9447	0.2615	4.2600e-003	0.1319	6.6900e-003	0.1385	0.0361	6.4000e-003	0.0425		473.1469	473.1469	0.0321	0.0754	496.4091
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0414	0.0293	0.3586	1.0300e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		105.6747	105.6747	2.7500e-003	2.8700e-003	106.5997
Total	**0.0557**	**0.9740**	**0.6201**	**5.2900e-003**	**0.2596**	**7.3600e-003**	**0.2669**	**0.0700**	**7.0100e-003**	**0.0770**		**578.8216**	**578.8216**	**0.0349**	**0.0782**	**603.0088**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2114	0.0000	2.2114	1.1365	0.0000	1.1365			0.0000			0.0000
Off-Road	0.5496	2.3815	24.9653	0.0460		0.0733	0.0733		0.0733	0.0733	0.0000	4,436.0725	4,436.0725	1.2722		4,467.8784
Total	**0.5496**	**2.3815**	**24.9653**	**0.0460**	**2.2114**	**0.0733**	**2.2847**	**1.1365**	**0.0733**	**1.2098**	**0.0000**	**4,436.0725**	**4,436.0725**	**1.2722**		**4,467.8784**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation/Shoring - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0143	0.9447	0.2615	4.2600e-003	0.1319	6.6900e-003	0.1385	0.0361	6.4000e-003	0.0425		473.1469	473.1469	0.0321	0.0754	496.4091
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0414	0.0293	0.3586	1.0300e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		105.6747	105.6747	2.7500e-003	2.8700e-003	106.5997
Total	**0.0557**	**0.9740**	**0.6201**	**5.2900e-003**	**0.2596**	**7.3600e-003**	**0.2669**	**0.0700**	**7.0100e-003**	**0.0770**		**578.8216**	**578.8216**	**0.0349**	**0.0782**	**603.0088**

3.4 Installation/Backfill - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.8491	33.0106	41.3903	0.0839		1.5242	1.5242		1.4698	1.4698		7,999.7991	7,999.7991	1.5016		8,037.3379
Total	**3.8491**	**33.0106**	**41.3903**	**0.0839**		**1.5242**	**1.5242**		**1.4698**	**1.4698**		**7,999.7991**	**7,999.7991**	**1.5016**		**8,037.3379**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4900e-003	0.0983	0.0272	4.4000e-004	0.0137	7.0000e-004	0.0144	3.7600e-003	6.7000e-004	4.4200e-003		49.2224	49.2224	3.3400e-003	7.8400e-003	51.6424
Vendor	5.4900e-003	0.2216	0.0804	1.0100e-003	0.0367	1.2300e-003	0.0380	0.0106	1.1800e-003	0.0118		110.0489	110.0489	4.5000e-003	0.0165	115.0746
Worker	0.0414	0.0293	0.3586	1.0300e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		105.6747	105.6747	2.7500e-003	2.8700e-003	106.5997
Total	**0.0484**	**0.3491**	**0.4662**	**2.4800e-003**	**0.1782**	**2.6000e-003**	**0.1808**	**0.0482**	**2.4600e-003**	**0.0507**		**264.9460**	**264.9460**	**0.0106**	**0.0272**	**273.3167**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9524	4.9414	49.6779	0.0839		0.1241	0.1241		0.1241	0.1241	0.0000	7,999.7991	7,999.7991	1.5016		8,037.3379
Total	**0.9524**	**4.9414**	**49.6779**	**0.0839**		**0.1241**	**0.1241**		**0.1241**	**0.1241**	**0.0000**	**7,999.7991**	**7,999.7991**	**1.5016**		**8,037.3379**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4900e-003	0.0983	0.0272	4.4000e-004	0.0137	7.0000e-004	0.0144	3.7600e-003	6.7000e-004	4.4200e-003		49.2224	49.2224	3.3400e-003	7.8400e-003	51.6424
Vendor	5.4900e-003	0.2216	0.0804	1.0100e-003	0.0367	1.2300e-003	0.0380	0.0106	1.1800e-003	0.0118		110.0489	110.0489	4.5000e-003	0.0165	115.0746
Worker	0.0414	0.0293	0.3586	1.0300e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		105.6747	105.6747	2.7500e-003	2.8700e-003	106.5997
Total	**0.0484**	**0.3491**	**0.4662**	**2.4800e-003**	**0.1782**	**2.6000e-003**	**0.1808**	**0.0482**	**2.4600e-003**	**0.0507**		**264.9460**	**264.9460**	**0.0106**	**0.0272**	**273.3167**

3.5 Restoration - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7061**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**		**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0414	0.0293	0.3586	1.0300e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		105.6747	105.6747	2.7500e-003	2.8700e-003	106.5997
Total	**0.0414**	**0.0293**	**0.3586**	**1.0300e-003**	**0.1277**	**6.7000e-004**	**0.1284**	**0.0339**	**6.1000e-004**	**0.0345**		**105.6747**	**105.6747**	**2.7500e-003**	**2.8700e-003**	**106.5997**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1119	0.4851	6.9028	0.0113		0.0149	0.0149		0.0149	0.0149	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2069**	**0.4851**	**6.9028**	**0.0113**		**0.0149**	**0.0149**		**0.0149**	**0.0149**	**0.0000**	**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0414	0.0293	0.3586	1.0300e-003	0.1277	6.7000e-004	0.1284	0.0339	6.1000e-004	0.0345		105.6747	105.6747	2.7500e-003	2.8700e-003	106.5997
Total	**0.0414**	**0.0293**	**0.3586**	**1.0300e-003**	**0.1277**	**6.7000e-004**	**0.1284**	**0.0339**	**6.1000e-004**	**0.0345**		**105.6747**	**105.6747**	**2.7500e-003**	**2.8700e-003**	**106.5997**

3.5 Restoration - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269		1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6853**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**		**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0388	0.0262	0.3340	1.0000e-003	0.1277	6.4000e-004	0.1284	0.0339	5.9000e-004	0.0345		103.2512	103.2512	2.5000e-003	2.6700e-003	104.1100
Total	**0.0388**	**0.0262**	**0.3340**	**1.0000e-003**	**0.1277**	**6.4000e-004**	**0.1284**	**0.0339**	**5.9000e-004**	**0.0345**		**103.2512**	**103.2512**	**2.5000e-003**	**2.6700e-003**	**104.1100**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1119	0.4851	6.9028	0.0113		0.0149	0.0149		0.0149	0.0149	0.0000	1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2069**	**0.4851**	**6.9028**	**0.0113**		**0.0149**	**0.0149**		**0.0149**	**0.0149**	**0.0000**	**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0388	0.0262	0.3340	1.0000e-003	0.1277	6.4000e-004	0.1284	0.0339	5.9000e-004	0.0345		103.2512	103.2512	2.5000e-003	2.6700e-003	104.1100
Total	**0.0388**	**0.0262**	**0.3340**	**1.0000e-003**	**0.1277**	**6.4000e-004**	**0.1284**	**0.0339**	**5.9000e-004**	**0.0345**		**103.2512**	**103.2512**	**2.5000e-003**	**2.6700e-003**	**104.1100**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.548670	0.058343	0.171689	0.130773	0.027316	0.007545	0.011806	0.006161	0.000681	0.000392	0.029028	0.000637	0.006958

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0167	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003
Unmitigated	0.0167	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.8000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0135					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.6000e-004	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003
Total	**0.0167**	**4.0000e-005**	**3.8800e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**8.3400e-003**	**8.3400e-003**	**2.0000e-005**		**8.8800e-003**

VTA-SB Counties Intertie Project - Pipeline - Mitigated - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.8000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0135					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.6000e-004	4.0000e-005	3.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.3400e-003	8.3400e-003	2.0000e-005		8.8800e-003
Total	**0.0167**	**4.0000e-005**	**3.8800e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**8.3400e-003**	**8.3400e-003**	**2.0000e-005**		**8.8800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation

South Central Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	0.42	1000sqft	0.01	418.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on the dimensions of the temporary booster pump station. (22 feet by 19 feet = 418 square feet ground distrubance)

Construction Phase - Adjusted construction schedule to meet applicant provided schedule. Assume no paving and architectural coating for temporary pump station.

Trips and VMT - Worker trips provided by the applicant.

Grading -

Off-road Equipment - Equipment list provided by the applicant.

Construction Off-road Equipment Mitigation - Per VCAPCD Rule 55. Implemented Tier 4 final mitigation

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblFleetMix	HHD	6.1320e-003	6.0550e-003
tblFleetMix	LDA	0.52	0.51
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT2	0.19	0.19
tblFleetMix	LHD1	0.03	0.03
tblFleetMix	LHD2	7.8410e-003	7.9830e-003
tblFleetMix	MCY	0.03	0.03
tblFleetMix	MDV	0.14	0.14
tblFleetMix	MH	6.1180e-003	6.4500e-003
tblFleetMix	MHD	0.01	0.01
tblFleetMix	OBUS	8.2400e-004	8.3700e-004
tblFleetMix	SBUS	1.5440e-003	1.5630e-003
tblFleetMix	UBUS	4.4200e-004	4.4600e-004
tblLandUse	LandUseSquareFeet	420.00	418.00
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblTripsAndVMT	WorkerTripNumber	8.00	10.00
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	6.17	6.14
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	6.4060e-003	6.1290e-003
tblVehicleEF	HHD	1,034.77	1,047.01
tblVehicleEF	HHD	1,402.11	1,426.18
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.16	0.17

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.22	0.23
tblVehicleEF	HHD	2.6000e-005	3.2000e-005
tblVehicleEF	HHD	5.48	5.52
tblVehicleEF	HHD	2.85	2.92
tblVehicleEF	HHD	2.49	2.48
tblVehicleEF	HHD	3.3150e-003	3.4930e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	2.0000e-006
tblVehicleEF	HHD	3.1710e-003	3.3420e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7930e-003	8.7900e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	3.0000e-006	4.0000e-006
tblVehicleEF	HHD	1.9700e-004	2.5200e-004
tblVehicleEF	HHD	0.42	0.42
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.4000e-005	1.2600e-004
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	9.5520e-003	9.6730e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	3.0000e-006	4.0000e-006
tblVehicleEF	HHD	1.9700e-004	2.5200e-004
tblVehicleEF	HHD	0.48	0.48
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	0.12	0.12
tblVehicleEF	HHD	8.4000e-005	1.2600e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	6.08	6.05
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	5.9790e-003	5.7210e-003
tblVehicleEF	HHD	1,024.20	1,036.61
tblVehicleEF	HHD	1,402.11	1,426.18
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.16	0.16
tblVehicleEF	HHD	0.22	0.23
tblVehicleEF	HHD	2.5000e-005	3.1000e-005
tblVehicleEF	HHD	5.26	5.30
tblVehicleEF	HHD	2.74	2.81
tblVehicleEF	HHD	2.49	2.48
tblVehicleEF	HHD	2.8760e-003	3.0250e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	2.0000e-006
tblVehicleEF	HHD	2.7510e-003	2.8940e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7930e-003	8.7900e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	6.0000e-006	7.0000e-006
tblVehicleEF	HHD	1.9800e-004	2.5200e-004
tblVehicleEF	HHD	0.44	0.44
tblVehicleEF	HHD	4.0000e-006	5.0000e-006
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.2000e-005	1.2200e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	9.4530e-003	9.5760e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.0000e-006	7.0000e-006
tblVehicleEF	HHD	1.9800e-004	2.5200e-004
tblVehicleEF	HHD	0.51	0.51
tblVehicleEF	HHD	4.0000e-006	5.0000e-006
tblVehicleEF	HHD	0.12	0.12
tblVehicleEF	HHD	8.2000e-005	1.2200e-004
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	0.00	1.0000e-006
tblVehicleEF	HHD	6.30	6.27
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	6.6800e-003	6.3920e-003
tblVehicleEF	HHD	1,049.38	1,061.39
tblVehicleEF	HHD	1,402.11	1,426.18
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.17	0.17
tblVehicleEF	HHD	0.22	0.23
tblVehicleEF	HHD	2.7000e-005	3.3000e-005
tblVehicleEF	HHD	5.79	5.83
tblVehicleEF	HHD	2.82	2.89
tblVehicleEF	HHD	2.49	2.48
tblVehicleEF	HHD	3.9220e-003	4.1380e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	2.0000e-006

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	3.7520e-003	3.9590e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7930e-003	8.7900e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	2.1900e-004	2.8300e-004
tblVehicleEF	HHD	0.38	0.38
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	9.1000e-005	1.3500e-004
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	9.6880e-003	9.8080e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	2.1900e-004	2.8300e-004
tblVehicleEF	HHD	0.44	0.44
tblVehicleEF	HHD	0.12	0.12
tblVehicleEF	HHD	9.1000e-005	1.3500e-004
tblVehicleEF	LDA	1.8920e-003	2.1510e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.54	0.58
tblVehicleEF	LDA	2.15	2.23
tblVehicleEF	LDA	243.01	248.89
tblVehicleEF	LDA	51.93	53.20
tblVehicleEF	LDA	4.2670e-003	4.5780e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.18	0.19
tblVehicleEF	LDA	1.3730e-003	1.4360e-003
tblVehicleEF	LDA	1.7560e-003	1.8310e-003

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tblVehicleEF	LDA	1.2650e-003	1.3240e-003
tblVehicleEF	LDA	1.6140e-003	1.6840e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	7.2190e-003	8.3800e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.21	0.23
tblVehicleEF	LDA	2.3550e-003	2.4310e-003
tblVehicleEF	LDA	5.0300e-004	5.2000e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.23	0.26
tblVehicleEF	LDA	2.0220e-003	2.2970e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.59	0.63
tblVehicleEF	LDA	1.79	1.85
tblVehicleEF	LDA	252.11	258.22
tblVehicleEF	LDA	51.25	52.49
tblVehicleEF	LDA	3.9500e-003	4.2360e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.16	0.17
tblVehicleEF	LDA	1.3730e-003	1.4360e-003
tblVehicleEF	LDA	1.7560e-003	1.8310e-003
tblVehicleEF	LDA	1.2650e-003	1.3240e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	1.6140e-003	1.6840e-003
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	7.6170e-003	8.8360e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.19	0.20
tblVehicleEF	LDA	2.4440e-003	2.5230e-003
tblVehicleEF	LDA	4.9700e-004	5.1300e-004
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.20	0.22
tblVehicleEF	LDA	1.8490e-003	2.1030e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.54	0.58
tblVehicleEF	LDA	2.37	2.45
tblVehicleEF	LDA	241.44	247.28
tblVehicleEF	LDA	52.33	53.61
tblVehicleEF	LDA	4.3140e-003	4.6290e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.19	0.20
tblVehicleEF	LDA	1.3730e-003	1.4360e-003
tblVehicleEF	LDA	1.7560e-003	1.8310e-003
tblVehicleEF	LDA	1.2650e-003	1.3240e-003
tblVehicleEF	LDA	1.6140e-003	1.6840e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	7.1030e-003	8.2500e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.23	0.25
tblVehicleEF	LDA	2.3400e-003	2.4160e-003
tblVehicleEF	LDA	5.0700e-004	5.2400e-004
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.25	0.27
tblVehicleEF	LDT1	4.2150e-003	4.7780e-003
tblVehicleEF	LDT1	0.07	0.07
tblVehicleEF	LDT1	0.94	1.03
tblVehicleEF	LDT1	2.37	2.46
tblVehicleEF	LDT1	293.37	299.13
tblVehicleEF	LDT1	63.65	64.92
tblVehicleEF	LDT1	6.5420e-003	7.1830e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.25	0.26
tblVehicleEF	LDT1	1.7680e-003	1.8830e-003
tblVehicleEF	LDT1	2.2640e-003	2.4020e-003
tblVehicleEF	LDT1	1.6280e-003	1.7340e-003
tblVehicleEF	LDT1	2.0810e-003	2.2080e-003
tblVehicleEF	LDT1	0.09	0.09

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.32	0.36
tblVehicleEF	LDT1	2.8440e-003	2.9230e-003
tblVehicleEF	LDT1	6.1700e-004	6.3400e-004
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.36	0.39
tblVehicleEF	LDT1	4.4800e-003	5.0750e-003
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	1.01	1.11
tblVehicleEF	LDT1	1.97	2.04
tblVehicleEF	LDT1	302.82	308.81
tblVehicleEF	LDT1	62.85	64.08
tblVehicleEF	LDT1	5.9940e-003	6.5810e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.22	0.24
tblVehicleEF	LDT1	1.7680e-003	1.8830e-003
tblVehicleEF	LDT1	2.2640e-003	2.4020e-003
tblVehicleEF	LDT1	1.6280e-003	1.7340e-003
tblVehicleEF	LDT1	2.0810e-003	2.2080e-003
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.19	0.20

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.08	0.08
tblVehicleEF	LDT1	0.28	0.31
tblVehicleEF	LDT1	2.9360e-003	3.0180e-003
tblVehicleEF	LDT1	6.0900e-004	6.2600e-004
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.08	0.08
tblVehicleEF	LDT1	0.31	0.34
tblVehicleEF	LDT1	4.1260e-003	4.6790e-003
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.93	1.02
tblVehicleEF	LDT1	2.61	2.71
tblVehicleEF	LDT1	291.74	297.46
tblVehicleEF	LDT1	64.12	65.41
tblVehicleEF	LDT1	6.6350e-003	7.2860e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.26	0.28
tblVehicleEF	LDT1	1.7680e-003	1.8830e-003
tblVehicleEF	LDT1	2.2640e-003	2.4020e-003
tblVehicleEF	LDT1	1.6280e-003	1.7340e-003
tblVehicleEF	LDT1	2.0810e-003	2.2080e-003
tblVehicleEF	LDT1	0.06	0.07
tblVehicleEF	LDT1	0.20	0.22
tblVehicleEF	LDT1	0.06	0.06

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.11	0.11
tblVehicleEF	LDT1	0.35	0.38
tblVehicleEF	LDT1	2.8280e-003	2.9070e-003
tblVehicleEF	LDT1	6.2200e-004	6.3900e-004
tblVehicleEF	LDT1	0.06	0.07
tblVehicleEF	LDT1	0.20	0.22
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.11	0.11
tblVehicleEF	LDT1	0.38	0.42
tblVehicleEF	LDT2	3.7520e-003	4.1960e-003
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.85	0.93
tblVehicleEF	LDT2	2.84	2.93
tblVehicleEF	LDT2	315.70	324.31
tblVehicleEF	LDT2	69.42	71.32
tblVehicleEF	LDT2	6.9230e-003	7.5900e-003
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.30	0.33
tblVehicleEF	LDT2	1.4500e-003	1.5020e-003
tblVehicleEF	LDT2	1.8750e-003	1.9440e-003
tblVehicleEF	LDT2	1.3350e-003	1.3830e-003
tblVehicleEF	LDT2	1.7240e-003	1.7870e-003
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.16	0.16
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.02	0.02

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.35	0.38
tblVehicleEF	LDT2	3.0600e-003	3.1690e-003
tblVehicleEF	LDT2	6.7300e-004	6.9700e-004
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.16	0.16
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.39	0.42
tblVehicleEF	LDT2	3.9870e-003	4.4550e-003
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.92	0.99
tblVehicleEF	LDT2	2.36	2.43
tblVehicleEF	LDT2	324.76	333.68
tblVehicleEF	LDT2	68.49	70.36
tblVehicleEF	LDT2	6.3830e-003	6.9960e-003
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.28	0.30
tblVehicleEF	LDT2	1.4500e-003	1.5020e-003
tblVehicleEF	LDT2	1.8750e-003	1.9440e-003
tblVehicleEF	LDT2	1.3350e-003	1.3830e-003
tblVehicleEF	LDT2	1.7240e-003	1.7870e-003
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.16	0.17
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.07

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	0.31	0.33
tblVehicleEF	LDT2	3.1480e-003	3.2600e-003
tblVehicleEF	LDT2	6.6400e-004	6.8800e-004
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.16	0.17
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.34	0.37
tblVehicleEF	LDT2	3.6740e-003	4.1100e-003
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.85	0.92
tblVehicleEF	LDT2	3.12	3.23
tblVehicleEF	LDT2	314.16	322.73
tblVehicleEF	LDT2	69.96	71.88
tblVehicleEF	LDT2	7.0010e-003	7.6770e-003
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.08	0.10
tblVehicleEF	LDT2	0.32	0.35
tblVehicleEF	LDT2	1.4500e-003	1.5020e-003
tblVehicleEF	LDT2	1.8750e-003	1.9440e-003
tblVehicleEF	LDT2	1.3350e-003	1.3830e-003
tblVehicleEF	LDT2	1.7240e-003	1.7870e-003
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.17	0.18
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.38	0.41

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tblVehicleEF	LDT2	3.0450e-003	3.1530e-003
tblVehicleEF	LDT2	6.7800e-004	7.0200e-004
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.17	0.18
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.41	0.45
tblVehicleEF	LHD1	4.3940e-003	4.4830e-003
tblVehicleEF	LHD1	8.6160e-003	9.3280e-003
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.91	0.98
tblVehicleEF	LHD1	0.97	1.00
tblVehicleEF	LHD1	9.38	9.45
tblVehicleEF	LHD1	702.79	711.82
tblVehicleEF	LHD1	10.01	10.15
tblVehicleEF	LHD1	9.1000e-004	9.1200e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	1.37	1.50
tblVehicleEF	LHD1	0.28	0.29
tblVehicleEF	LHD1	1.0320e-003	1.0280e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.4500e-004	2.5500e-004
tblVehicleEF	LHD1	9.8800e-004	9.8300e-004
tblVehicleEF	LHD1	2.5240e-003	2.5230e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	2.2500e-004	2.3400e-004
tblVehicleEF	LHD1	1.9440e-003	2.0240e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2020e-003	1.2390e-003
tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	0.25	0.25
tblVehicleEF	LHD1	0.07	0.08
tblVehicleEF	LHD1	6.8340e-003	6.9220e-003
tblVehicleEF	LHD1	9.9000e-005	1.0000e-004
tblVehicleEF	LHD1	1.9440e-003	2.0240e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.2020e-003	1.2390e-003
tblVehicleEF	LHD1	0.12	0.13
tblVehicleEF	LHD1	0.25	0.25
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	4.4060e-003	4.4950e-003
tblVehicleEF	LHD1	8.7800e-003	9.5160e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.92	1.00
tblVehicleEF	LHD1	0.91	0.94
tblVehicleEF	LHD1	9.38	9.45
tblVehicleEF	LHD1	702.82	711.85
tblVehicleEF	LHD1	9.90	10.04
tblVehicleEF	LHD1	9.1300e-004	9.1500e-004
tblVehicleEF	LHD1	0.05	0.05

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tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	1.32	1.44
tblVehicleEF	LHD1	0.27	0.28
tblVehicleEF	LHD1	1.0320e-003	1.0280e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.4500e-004	2.5500e-004
tblVehicleEF	LHD1	9.8800e-004	9.8300e-004
tblVehicleEF	LHD1	2.5240e-003	2.5230e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	2.2500e-004	2.3400e-004
tblVehicleEF	LHD1	3.1170e-003	3.2550e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9460e-003	2.0180e-003
tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	0.24	0.24
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	6.8340e-003	6.9220e-003
tblVehicleEF	LHD1	9.8000e-005	9.9000e-005
tblVehicleEF	LHD1	3.1170e-003	3.2550e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.9460e-003	2.0180e-003
tblVehicleEF	LHD1	0.12	0.13
tblVehicleEF	LHD1	0.24	0.24
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	4.3870e-003	4.4760e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	8.5210e-003	9.2200e-003
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.90	0.97
tblVehicleEF	LHD1	1.01	1.04
tblVehicleEF	LHD1	9.38	9.45
tblVehicleEF	LHD1	702.78	711.80
tblVehicleEF	LHD1	10.07	10.22
tblVehicleEF	LHD1	9.0900e-004	9.1200e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	1.36	1.49
tblVehicleEF	LHD1	0.30	0.30
tblVehicleEF	LHD1	1.0320e-003	1.0280e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.4500e-004	2.5500e-004
tblVehicleEF	LHD1	9.8800e-004	9.8300e-004
tblVehicleEF	LHD1	2.5240e-003	2.5230e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	2.2500e-004	2.3400e-004
tblVehicleEF	LHD1	1.3340e-003	1.3850e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	8.8100e-004	9.0500e-004
tblVehicleEF	LHD1	0.10	0.10
tblVehicleEF	LHD1	0.27	0.28
tblVehicleEF	LHD1	0.08	0.08

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tblVehicleEF	LHD1	6.8340e-003	6.9220e-003
tblVehicleEF	LHD1	1.0000e-004	1.0100e-004
tblVehicleEF	LHD1	1.3340e-003	1.3850e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	8.8100e-004	9.0500e-004
tblVehicleEF	LHD1	0.12	0.13
tblVehicleEF	LHD1	0.27	0.28
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD2	3.0110e-003	3.0890e-003
tblVehicleEF	LHD2	5.9010e-003	6.2600e-003
tblVehicleEF	LHD2	8.5190e-003	9.0470e-003
tblVehicleEF	LHD2	0.13	0.13
tblVehicleEF	LHD2	0.61	0.65
tblVehicleEF	LHD2	0.56	0.59
tblVehicleEF	LHD2	14.59	14.68
tblVehicleEF	LHD2	704.11	714.03
tblVehicleEF	LHD2	7.19	7.35
tblVehicleEF	LHD2	1.8700e-003	1.8760e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	1.33	1.45
tblVehicleEF	LHD2	0.18	0.19
tblVehicleEF	LHD2	1.4680e-003	1.4580e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.1500e-004	1.2000e-004
tblVehicleEF	LHD2	1.4050e-003	1.3940e-003

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tblVehicleEF	LHD2	2.7120e-003	2.7090e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	1.1000e-004
tblVehicleEF	LHD2	9.2800e-004	9.7300e-004
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2200e-004	6.3900e-004
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	1.3900e-004	1.4000e-004
tblVehicleEF	LHD2	6.7870e-003	6.8830e-003
tblVehicleEF	LHD2	7.1000e-005	7.3000e-005
tblVehicleEF	LHD2	9.2800e-004	9.7300e-004
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2200e-004	6.3900e-004
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	3.0200e-003	3.0970e-003
tblVehicleEF	LHD2	5.9520e-003	6.3180e-003
tblVehicleEF	LHD2	8.1300e-003	8.6340e-003
tblVehicleEF	LHD2	0.13	0.13
tblVehicleEF	LHD2	0.62	0.66
tblVehicleEF	LHD2	0.53	0.55
tblVehicleEF	LHD2	14.59	14.68
tblVehicleEF	LHD2	704.12	714.04
tblVehicleEF	LHD2	7.13	7.28

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tblVehicleEF	LHD2	1.8710e-003	1.8770e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	1.28	1.39
tblVehicleEF	LHD2	0.17	0.18
tblVehicleEF	LHD2	1.4680e-003	1.4580e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.1500e-004	1.2000e-004
tblVehicleEF	LHD2	1.4050e-003	1.3940e-003
tblVehicleEF	LHD2	2.7120e-003	2.7090e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	1.1000e-004
tblVehicleEF	LHD2	1.4630e-003	1.5380e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0030e-003	1.0340e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	1.3900e-004	1.4000e-004
tblVehicleEF	LHD2	6.7870e-003	6.8830e-003
tblVehicleEF	LHD2	7.1000e-005	7.2000e-005
tblVehicleEF	LHD2	1.4630e-003	1.5380e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0030e-003	1.0340e-003
tblVehicleEF	LHD2	0.11	0.12

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tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	3.0060e-003	3.0840e-003
tblVehicleEF	LHD2	5.8710e-003	6.2260e-003
tblVehicleEF	LHD2	8.7600e-003	9.3040e-003
tblVehicleEF	LHD2	0.13	0.13
tblVehicleEF	LHD2	0.61	0.65
tblVehicleEF	LHD2	0.59	0.61
tblVehicleEF	LHD2	14.59	14.68
tblVehicleEF	LHD2	704.11	714.02
tblVehicleEF	LHD2	7.23	7.39
tblVehicleEF	LHD2	1.8690e-003	1.8750e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	1.32	1.44
tblVehicleEF	LHD2	0.19	0.20
tblVehicleEF	LHD2	1.4680e-003	1.4580e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.1500e-004	1.2000e-004
tblVehicleEF	LHD2	1.4050e-003	1.3940e-003
tblVehicleEF	LHD2	2.7120e-003	2.7090e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	1.1000e-004
tblVehicleEF	LHD2	6.4600e-004	6.7400e-004
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.5700e-004	4.6800e-004

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	1.3900e-004	1.4000e-004
tblVehicleEF	LHD2	6.7870e-003	6.8830e-003
tblVehicleEF	LHD2	7.2000e-005	7.3000e-005
tblVehicleEF	LHD2	6.4600e-004	6.7400e-004
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.5700e-004	4.6800e-004
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	MCY	0.33	0.33
tblVehicleEF	MCY	0.26	0.26
tblVehicleEF	MCY	19.84	20.16
tblVehicleEF	MCY	8.92	8.89
tblVehicleEF	MCY	210.33	210.21
tblVehicleEF	MCY	62.43	62.73
tblVehicleEF	MCY	0.07	0.07
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	1.17	1.18
tblVehicleEF	MCY	0.27	0.27
tblVehicleEF	MCY	1.9280e-003	1.9100e-003
tblVehicleEF	MCY	3.1490e-003	3.3460e-003
tblVehicleEF	MCY	1.8050e-003	1.7900e-003
tblVehicleEF	MCY	2.9700e-003	3.1600e-003
tblVehicleEF	MCY	0.92	0.92
tblVehicleEF	MCY	0.85	0.85

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MCY	0.57	0.57
tblVehicleEF	MCY	2.26	2.28
tblVehicleEF	MCY	0.79	0.81
tblVehicleEF	MCY	1.99	2.00
tblVehicleEF	MCY	2.0810e-003	2.0800e-003
tblVehicleEF	MCY	6.1800e-004	6.2100e-004
tblVehicleEF	MCY	0.92	0.92
tblVehicleEF	MCY	0.85	0.85
tblVehicleEF	MCY	0.57	0.57
tblVehicleEF	MCY	2.78	2.79
tblVehicleEF	MCY	0.79	0.81
tblVehicleEF	MCY	2.17	2.18
tblVehicleEF	MCY	0.32	0.32
tblVehicleEF	MCY	0.22	0.22
tblVehicleEF	MCY	18.46	18.73
tblVehicleEF	MCY	7.86	7.85
tblVehicleEF	MCY	207.82	207.61
tblVehicleEF	MCY	59.77	60.07
tblVehicleEF	MCY	0.06	0.06
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	0.25	0.25
tblVehicleEF	MCY	1.9280e-003	1.9100e-003
tblVehicleEF	MCY	3.1490e-003	3.3460e-003
tblVehicleEF	MCY	1.8050e-003	1.7900e-003
tblVehicleEF	MCY	2.9700e-003	3.1600e-003
tblVehicleEF	MCY	1.62	1.62
tblVehicleEF	MCY	0.90	0.91
tblVehicleEF	MCY	1.10	1.11

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MCY	2.17	2.18
tblVehicleEF	MCY	0.73	0.75
tblVehicleEF	MCY	1.69	1.70
tblVehicleEF	MCY	2.0570e-003	2.0550e-003
tblVehicleEF	MCY	5.9100e-004	5.9400e-004
tblVehicleEF	MCY	1.62	1.62
tblVehicleEF	MCY	0.90	0.91
tblVehicleEF	MCY	1.10	1.11
tblVehicleEF	MCY	2.66	2.67
tblVehicleEF	MCY	0.73	0.75
tblVehicleEF	MCY	1.84	1.85
tblVehicleEF	MCY	0.34	0.34
tblVehicleEF	MCY	0.28	0.28
tblVehicleEF	MCY	20.80	21.15
tblVehicleEF	MCY	9.60	9.57
tblVehicleEF	MCY	212.07	212.00
tblVehicleEF	MCY	64.14	64.44
tblVehicleEF	MCY	0.07	0.07
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	1.18	1.19
tblVehicleEF	MCY	0.28	0.28
tblVehicleEF	MCY	1.9280e-003	1.9100e-003
tblVehicleEF	MCY	3.1490e-003	3.3460e-003
tblVehicleEF	MCY	1.8050e-003	1.7900e-003
tblVehicleEF	MCY	2.9700e-003	3.1600e-003
tblVehicleEF	MCY	0.60	0.60
tblVehicleEF	MCY	1.05	1.07
tblVehicleEF	MCY	0.36	0.36
tblVehicleEF	MCY	2.32	2.34

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tblVehicleEF	MCY	0.92	0.94
tblVehicleEF	MCY	2.18	2.19
tblVehicleEF	MCY	2.0990e-003	2.0980e-003
tblVehicleEF	MCY	6.3500e-004	6.3800e-004
tblVehicleEF	MCY	0.60	0.60
tblVehicleEF	MCY	1.05	1.07
tblVehicleEF	MCY	0.36	0.36
tblVehicleEF	MCY	2.85	2.86
tblVehicleEF	MCY	0.92	0.94
tblVehicleEF	MCY	2.37	2.39
tblVehicleEF	MDV	4.1230e-003	4.6570e-003
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.88	0.96
tblVehicleEF	MDV	3.21	3.40
tblVehicleEF	MDV	388.99	398.83
tblVehicleEF	MDV	84.30	86.53
tblVehicleEF	MDV	8.8130e-003	9.5820e-003
tblVehicleEF	MDV	0.03	0.04
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.35	0.38
tblVehicleEF	MDV	1.4960e-003	1.5600e-003
tblVehicleEF	MDV	1.8690e-003	1.9670e-003
tblVehicleEF	MDV	1.3810e-003	1.4400e-003
tblVehicleEF	MDV	1.7180e-003	1.8090e-003
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.07	0.07

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	0.41	0.45
tblVehicleEF	MDV	3.7690e-003	3.8940e-003
tblVehicleEF	MDV	8.1700e-004	8.4600e-004
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.45	0.50
tblVehicleEF	MDV	4.3840e-003	4.9430e-003
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.94	1.03
tblVehicleEF	MDV	2.66	2.81
tblVehicleEF	MDV	398.35	408.52
tblVehicleEF	MDV	83.23	85.40
tblVehicleEF	MDV	8.2250e-003	8.9290e-003
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.32	0.35
tblVehicleEF	MDV	1.4960e-003	1.5600e-003
tblVehicleEF	MDV	1.8690e-003	1.9670e-003
tblVehicleEF	MDV	1.3810e-003	1.4400e-003
tblVehicleEF	MDV	1.7180e-003	1.8090e-003
tblVehicleEF	MDV	0.12	0.13
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.13	0.14
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.36	0.40

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tblVehicleEF	MDV	3.8590e-003	3.9890e-003
tblVehicleEF	MDV	8.0700e-004	8.3500e-004
tblVehicleEF	MDV	0.12	0.13
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.13	0.14
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.40	0.43
tblVehicleEF	MDV	4.0380e-003	4.5660e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.87	0.95
tblVehicleEF	MDV	3.53	3.74
tblVehicleEF	MDV	387.41	397.20
tblVehicleEF	MDV	84.92	87.19
tblVehicleEF	MDV	8.9000e-003	9.6800e-003
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.37	0.40
tblVehicleEF	MDV	1.4960e-003	1.5600e-003
tblVehicleEF	MDV	1.8690e-003	1.9670e-003
tblVehicleEF	MDV	1.3810e-003	1.4400e-003
tblVehicleEF	MDV	1.7180e-003	1.8090e-003
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.17	0.18
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.44	0.49
tblVehicleEF	MDV	3.7530e-003	3.8780e-003

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tblVehicleEF	MDV	8.2300e-004	8.5200e-004
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.17	0.18
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.49	0.53
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.28	1.44
tblVehicleEF	MH	2.05	2.14
tblVehicleEF	MH	1,507.51	1,527.26
tblVehicleEF	MH	18.41	18.86
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.66	1.68
tblVehicleEF	MH	0.25	0.25
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.4300e-004	2.5600e-004
tblVehicleEF	MH	3.2940e-003	3.2880e-003
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.2300e-004	2.3500e-004
tblVehicleEF	MH	0.71	0.75
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.33	0.34
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.10

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.8200e-004	1.8700e-004
tblVehicleEF	MH	0.71	0.75
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.33	0.34
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.32	1.49
tblVehicleEF	MH	1.91	1.99
tblVehicleEF	MH	1,507.57	1,527.34
tblVehicleEF	MH	18.17	18.60
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	1.57	1.60
tblVehicleEF	MH	0.23	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.4300e-004	2.5600e-004
tblVehicleEF	MH	3.2940e-003	3.2880e-003
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.2300e-004	2.3500e-004
tblVehicleEF	MH	1.10	1.17
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.52	0.55
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.02	0.02

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.09	0.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.8000e-004	1.8400e-004
tblVehicleEF	MH	1.10	1.17
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.52	0.55
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.26	1.42
tblVehicleEF	MH	2.13	2.22
tblVehicleEF	MH	1,507.46	1,527.22
tblVehicleEF	MH	18.55	19.00
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.65	1.68
tblVehicleEF	MH	0.26	0.26
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.4300e-004	2.5600e-004
tblVehicleEF	MH	3.2940e-003	3.2880e-003
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.2300e-004	2.3500e-004
tblVehicleEF	MH	0.51	0.54
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.24	0.25
tblVehicleEF	MH	0.07	0.08

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tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.8400e-004	1.8800e-004
tblVehicleEF	MH	0.51	0.54
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.24	0.25
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.11	0.11
tblVehicleEF	MHD	3.2810e-003	3.3490e-003
tblVehicleEF	MHD	2.0190e-003	2.3440e-003
tblVehicleEF	MHD	9.1410e-003	9.7650e-003
tblVehicleEF	MHD	0.36	0.37
tblVehicleEF	MHD	0.26	0.30
tblVehicleEF	MHD	1.08	1.17
tblVehicleEF	MHD	68.31	69.46
tblVehicleEF	MHD	1,019.09	1,034.77
tblVehicleEF	MHD	8.80	9.28
tblVehicleEF	MHD	9.8740e-003	0.01
tblVehicleEF	MHD	0.13	0.14
tblVehicleEF	MHD	6.6810e-003	6.8530e-003
tblVehicleEF	MHD	0.40	0.42
tblVehicleEF	MHD	1.44	1.45
tblVehicleEF	MHD	1.70	1.68
tblVehicleEF	MHD	3.8000e-004	4.3900e-004
tblVehicleEF	MHD	8.9210e-003	8.9900e-003
tblVehicleEF	MHD	1.0400e-004	1.1100e-004
tblVehicleEF	MHD	3.6300e-004	4.2000e-004

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tblVehicleEF	MHD	8.5300e-003	8.5960e-003
tblVehicleEF	MHD	9.6000e-005	1.0200e-004
tblVehicleEF	MHD	3.7300e-004	4.1100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.4700e-004	2.6700e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	6.4800e-004	6.5900e-004
tblVehicleEF	MHD	9.7110e-003	9.8620e-003
tblVehicleEF	MHD	8.7000e-005	9.2000e-005
tblVehicleEF	MHD	3.7300e-004	4.1100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.4700e-004	2.6700e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.06
tblVehicleEF	MHD	3.0880e-003	3.1480e-003
tblVehicleEF	MHD	2.0630e-003	2.3970e-003
tblVehicleEF	MHD	8.7090e-003	9.3010e-003
tblVehicleEF	MHD	0.30	0.30
tblVehicleEF	MHD	0.26	0.30
tblVehicleEF	MHD	1.01	1.10
tblVehicleEF	MHD	68.45	69.70
tblVehicleEF	MHD	1,019.09	1,034.78
tblVehicleEF	MHD	8.68	9.15
tblVehicleEF	MHD	9.8530e-003	0.01

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	0.13	0.14
tblVehicleEF	MHD	6.4510e-003	6.6180e-003
tblVehicleEF	MHD	0.40	0.42
tblVehicleEF	MHD	1.38	1.39
tblVehicleEF	MHD	1.70	1.68
tblVehicleEF	MHD	3.2300e-004	3.7300e-004
tblVehicleEF	MHD	8.9210e-003	8.9900e-003
tblVehicleEF	MHD	1.0400e-004	1.1100e-004
tblVehicleEF	MHD	3.0900e-004	3.5700e-004
tblVehicleEF	MHD	8.5300e-003	8.5960e-003
tblVehicleEF	MHD	9.6000e-005	1.0200e-004
tblVehicleEF	MHD	5.9900e-004	6.6300e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.0600e-004	4.4100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	6.4900e-004	6.6100e-004
tblVehicleEF	MHD	9.7120e-003	9.8620e-003
tblVehicleEF	MHD	8.6000e-005	9.1000e-005
tblVehicleEF	MHD	5.9900e-004	6.6300e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.0600e-004	4.4100e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.06
tblVehicleEF	MHD	3.4680e-003	3.5400e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	1.9930e-003	2.3130e-003
tblVehicleEF	MHD	9.4030e-003	0.01
tblVehicleEF	MHD	0.42	0.43
tblVehicleEF	MHD	0.25	0.29
tblVehicleEF	MHD	1.13	1.23
tblVehicleEF	MHD	68.25	69.27
tblVehicleEF	MHD	1,019.08	1,034.76
tblVehicleEF	MHD	8.88	9.37
tblVehicleEF	MHD	9.9080e-003	0.01
tblVehicleEF	MHD	0.13	0.14
tblVehicleEF	MHD	6.8910e-003	7.0690e-003
tblVehicleEF	MHD	0.41	0.43
tblVehicleEF	MHD	1.42	1.44
tblVehicleEF	MHD	1.70	1.69
tblVehicleEF	MHD	4.5800e-004	5.3000e-004
tblVehicleEF	MHD	8.9210e-003	8.9900e-003
tblVehicleEF	MHD	1.0400e-004	1.1100e-004
tblVehicleEF	MHD	4.3800e-004	5.0700e-004
tblVehicleEF	MHD	8.5300e-003	8.5960e-003
tblVehicleEF	MHD	9.6000e-005	1.0200e-004
tblVehicleEF	MHD	2.5600e-004	2.8100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.8000e-004	1.9300e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	6.4700e-004	6.5700e-004
tblVehicleEF	MHD	9.7110e-003	9.8620e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	8.8000e-005	9.3000e-005
tblVehicleEF	MHD	2.5600e-004	2.8100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.8000e-004	1.9300e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	OBUS	7.9900e-003	8.0370e-003
tblVehicleEF	OBUS	7.5690e-003	8.7220e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.50	0.49
tblVehicleEF	OBUS	0.89	1.03
tblVehicleEF	OBUS	2.72	2.81
tblVehicleEF	OBUS	70.02	68.39
tblVehicleEF	OBUS	1,394.70	1,421.03
tblVehicleEF	OBUS	20.09	20.60
tblVehicleEF	OBUS	8.9990e-003	8.6950e-003
tblVehicleEF	OBUS	0.11	0.11
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.26	0.25
tblVehicleEF	OBUS	1.26	1.25
tblVehicleEF	OBUS	0.82	0.80
tblVehicleEF	OBUS	8.5000e-005	8.1000e-005
tblVehicleEF	OBUS	6.9550e-003	6.6020e-003
tblVehicleEF	OBUS	2.0400e-004	2.0900e-004
tblVehicleEF	OBUS	8.1000e-005	7.8000e-005
tblVehicleEF	OBUS	6.6370e-003	6.2990e-003
tblVehicleEF	OBUS	1.8800e-004	1.9200e-004

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tblVehicleEF	OBUS	1.6770e-003	1.7310e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	9.0800e-004	9.2500e-004
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	6.6800e-004	6.5300e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.9900e-004	2.0400e-004
tblVehicleEF	OBUS	1.6770e-003	1.7310e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	9.0800e-004	9.2500e-004
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.14	0.14
tblVehicleEF	OBUS	8.0580e-003	8.1030e-003
tblVehicleEF	OBUS	7.7810e-003	8.9710e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.50	0.49
tblVehicleEF	OBUS	0.92	1.05
tblVehicleEF	OBUS	2.53	2.62
tblVehicleEF	OBUS	69.26	67.66
tblVehicleEF	OBUS	1,394.74	1,421.08
tblVehicleEF	OBUS	19.77	20.27
tblVehicleEF	OBUS	8.8840e-003	8.5840e-003
tblVehicleEF	OBUS	0.11	0.11
tblVehicleEF	OBUS	0.02	0.02

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tblVehicleEF	OBUS	0.25	0.24
tblVehicleEF	OBUS	1.20	1.18
tblVehicleEF	OBUS	0.80	0.78
tblVehicleEF	OBUS	7.5000e-005	7.2000e-005
tblVehicleEF	OBUS	6.9550e-003	6.6020e-003
tblVehicleEF	OBUS	2.0400e-004	2.0900e-004
tblVehicleEF	OBUS	7.2000e-005	6.9000e-005
tblVehicleEF	OBUS	6.6370e-003	6.2990e-003
tblVehicleEF	OBUS	1.8800e-004	1.9200e-004
tblVehicleEF	OBUS	2.6160e-003	2.7120e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	1.4530e-003	1.4870e-003
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	6.6100e-004	6.4600e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.9600e-004	2.0100e-004
tblVehicleEF	OBUS	2.6160e-003	2.7120e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	1.4530e-003	1.4870e-003
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.13	0.14
tblVehicleEF	OBUS	7.9130e-003	7.9630e-003
tblVehicleEF	OBUS	7.4480e-003	8.5800e-003
tblVehicleEF	OBUS	0.02	0.02

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tblVehicleEF	OBUS	0.50	0.49
tblVehicleEF	OBUS	0.88	1.01
tblVehicleEF	OBUS	2.82	2.92
tblVehicleEF	OBUS	71.07	69.41
tblVehicleEF	OBUS	1,394.67	1,421.00
tblVehicleEF	OBUS	20.27	20.78
tblVehicleEF	OBUS	9.1630e-003	8.8530e-003
tblVehicleEF	OBUS	0.11	0.11
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.28	0.27
tblVehicleEF	OBUS	1.25	1.24
tblVehicleEF	OBUS	0.83	0.81
tblVehicleEF	OBUS	9.8000e-005	9.4000e-005
tblVehicleEF	OBUS	6.9550e-003	6.6020e-003
tblVehicleEF	OBUS	2.0400e-004	2.0900e-004
tblVehicleEF	OBUS	9.4000e-005	9.0000e-005
tblVehicleEF	OBUS	6.6370e-003	6.2990e-003
tblVehicleEF	OBUS	1.8800e-004	1.9200e-004
tblVehicleEF	OBUS	1.2110e-003	1.2440e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	6.7500e-004	6.8600e-004
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	6.7800e-004	6.6200e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	2.0100e-004	2.0600e-004
tblVehicleEF	OBUS	1.2110e-003	1.2440e-003

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tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	6.7500e-004	6.8600e-004
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.14	0.15
tblVehicleEF	SBUS	0.06	0.06
tblVehicleEF	SBUS	8.7580e-003	9.6490e-003
tblVehicleEF	SBUS	6.3970e-003	6.4810e-003
tblVehicleEF	SBUS	2.28	2.26
tblVehicleEF	SBUS	0.79	0.87
tblVehicleEF	SBUS	0.89	0.93
tblVehicleEF	SBUS	358.06	359.37
tblVehicleEF	SBUS	1,074.49	1,081.95
tblVehicleEF	SBUS	4.74	4.81
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	5.1790e-003	5.0570e-003
tblVehicleEF	SBUS	3.89	3.96
tblVehicleEF	SBUS	4.78	4.94
tblVehicleEF	SBUS	0.65	0.61
tblVehicleEF	SBUS	3.9690e-003	4.2250e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.2000e-005	3.3000e-005
tblVehicleEF	SBUS	3.7970e-003	4.0430e-003
tblVehicleEF	SBUS	2.6630e-003	2.6610e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	2.9000e-005	3.0000e-005

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tblVehicleEF	SBUS	1.0280e-003	1.0980e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.26	0.26
tblVehicleEF	SBUS	5.4200e-004	5.5100e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4100e-003	3.4220e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.7000e-005	4.8000e-005
tblVehicleEF	SBUS	1.0280e-003	1.0980e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.38	0.37
tblVehicleEF	SBUS	5.4200e-004	5.5100e-004
tblVehicleEF	SBUS	0.12	0.13
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.06	0.06
tblVehicleEF	SBUS	8.9030e-003	9.8160e-003
tblVehicleEF	SBUS	5.6780e-003	5.7510e-003
tblVehicleEF	SBUS	2.24	2.22
tblVehicleEF	SBUS	0.80	0.89
tblVehicleEF	SBUS	0.72	0.75
tblVehicleEF	SBUS	369.44	371.14
tblVehicleEF	SBUS	1,074.52	1,081.98
tblVehicleEF	SBUS	4.45	4.51
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	5.0060e-003	4.8880e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	4.00	4.07
tblVehicleEF	SBUS	4.59	4.74
tblVehicleEF	SBUS	0.65	0.61
tblVehicleEF	SBUS	3.3520e-003	3.5680e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.2000e-005	3.3000e-005
tblVehicleEF	SBUS	3.2070e-003	3.4140e-003
tblVehicleEF	SBUS	2.6630e-003	2.6610e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	2.9000e-005	3.0000e-005
tblVehicleEF	SBUS	1.5850e-003	1.7070e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.26	0.26
tblVehicleEF	SBUS	8.2800e-004	8.5000e-004
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.5180e-003	3.5340e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.4000e-005	4.5000e-005
tblVehicleEF	SBUS	1.5850e-003	1.7070e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.38	0.37
tblVehicleEF	SBUS	8.2800e-004	8.5000e-004
tblVehicleEF	SBUS	0.12	0.13
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.06	0.06

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tblVehicleEF	SBUS	8.6810e-003	9.5600e-003
tblVehicleEF	SBUS	6.7490e-003	6.8370e-003
tblVehicleEF	SBUS	2.34	2.31
tblVehicleEF	SBUS	0.78	0.86
tblVehicleEF	SBUS	0.98	1.02
tblVehicleEF	SBUS	342.35	343.13
tblVehicleEF	SBUS	1,074.48	1,081.93
tblVehicleEF	SBUS	4.88	4.95
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	5.3330e-003	5.2070e-003
tblVehicleEF	SBUS	3.75	3.81
tblVehicleEF	SBUS	4.73	4.89
tblVehicleEF	SBUS	0.66	0.62
tblVehicleEF	SBUS	4.8210e-003	5.1330e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.2000e-005	3.3000e-005
tblVehicleEF	SBUS	4.6120e-003	4.9110e-003
tblVehicleEF	SBUS	2.6630e-003	2.6610e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	2.9000e-005	3.0000e-005
tblVehicleEF	SBUS	7.5500e-004	8.0400e-004
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.26	0.26
tblVehicleEF	SBUS	4.1300e-004	4.1900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.04	0.04

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tblVehicleEF	SBUS	3.2620e-003	3.2690e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.8000e-005	4.9000e-005
tblVehicleEF	SBUS	7.5500e-004	8.0400e-004
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.38	0.38
tblVehicleEF	SBUS	4.1300e-004	4.1900e-004
tblVehicleEF	SBUS	0.12	0.13
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	UBUS	1.69	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	12.85	12.68
tblVehicleEF	UBUS	1.35	1.35
tblVehicleEF	UBUS	1,572.92	1,581.14
tblVehicleEF	UBUS	15.19	15.29
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.50	0.57
tblVehicleEF	UBUS	0.15	0.15
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5100e-003	4.4900e-003
tblVehicleEF	UBUS	1.4900e-004	1.4500e-004
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	6.2400e-003	6.2410e-003
tblVehicleEF	UBUS	4.3010e-003	4.2820e-003
tblVehicleEF	UBUS	1.3700e-004	1.3300e-004
tblVehicleEF	UBUS	6.8000e-004	6.2100e-004

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tblVehicleEF	UBUS	9.7270e-003	8.5820e-003
tblVehicleEF	UBUS	5.3300e-004	4.7800e-004
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	2.4830e-003	2.1230e-003
tblVehicleEF	UBUS	0.08	0.07
tblVehicleEF	UBUS	9.5600e-003	9.7130e-003
tblVehicleEF	UBUS	1.5000e-004	1.5100e-004
tblVehicleEF	UBUS	6.8000e-004	6.2100e-004
tblVehicleEF	UBUS	9.7270e-003	8.5820e-003
tblVehicleEF	UBUS	5.3300e-004	4.7800e-004
tblVehicleEF	UBUS	1.74	1.71
tblVehicleEF	UBUS	2.4830e-003	2.1230e-003
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	1.69	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	12.85	12.68
tblVehicleEF	UBUS	1.15	1.16
tblVehicleEF	UBUS	1,572.93	1,581.15
tblVehicleEF	UBUS	14.86	14.96
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.50	0.56
tblVehicleEF	UBUS	0.14	0.14
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5100e-003	4.4900e-003
tblVehicleEF	UBUS	1.4900e-004	1.4500e-004
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	6.2400e-003	6.2410e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	4.3010e-003	4.2820e-003
tblVehicleEF	UBUS	1.3700e-004	1.3300e-004
tblVehicleEF	UBUS	1.0570e-003	9.7200e-004
tblVehicleEF	UBUS	0.01	8.9120e-003
tblVehicleEF	UBUS	8.9500e-004	8.0700e-004
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	2.2050e-003	1.8900e-003
tblVehicleEF	UBUS	0.07	0.07
tblVehicleEF	UBUS	9.5600e-003	9.7130e-003
tblVehicleEF	UBUS	1.4700e-004	1.4800e-004
tblVehicleEF	UBUS	1.0570e-003	9.7200e-004
tblVehicleEF	UBUS	0.01	8.9120e-003
tblVehicleEF	UBUS	8.9500e-004	8.0700e-004
tblVehicleEF	UBUS	1.74	1.71
tblVehicleEF	UBUS	2.2050e-003	1.8900e-003
tblVehicleEF	UBUS	0.08	0.07
tblVehicleEF	UBUS	1.69	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	12.85	12.68
tblVehicleEF	UBUS	1.46	1.47
tblVehicleEF	UBUS	1,572.92	1,581.14
tblVehicleEF	UBUS	15.39	15.49
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.50	0.57
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5100e-003	4.4900e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	1.4900e-004	1.4500e-004
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	6.2400e-003	6.2410e-003
tblVehicleEF	UBUS	4.3010e-003	4.2820e-003
tblVehicleEF	UBUS	1.3700e-004	1.3300e-004
tblVehicleEF	UBUS	4.9100e-004	4.4600e-004
tblVehicleEF	UBUS	0.01	9.1860e-003
tblVehicleEF	UBUS	3.8400e-004	3.4300e-004
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	3.0840e-003	2.6240e-003
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	9.5600e-003	9.7130e-003
tblVehicleEF	UBUS	1.5200e-004	1.5300e-004
tblVehicleEF	UBUS	4.9100e-004	4.4600e-004
tblVehicleEF	UBUS	0.01	9.1860e-003
tblVehicleEF	UBUS	3.8400e-004	3.4300e-004
tblVehicleEF	UBUS	1.74	1.71
tblVehicleEF	UBUS	3.0840e-003	2.6240e-003
tblVehicleEF	UBUS	0.09	0.09

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	3.1000e-004	3.5400e-003	2.7800e-003	1.0000e-005	3.1000e-004	1.3000e-004	4.3000e-004	4.0000e-005	1.2000e-004	1.6000e-004	0.0000	0.5496	0.5496	1.7000e-004	0.0000	0.5541
Maximum	**3.1000e-004**	**3.5400e-003**	**2.7800e-003**	**1.0000e-005**	**3.1000e-004**	**1.3000e-004**	**4.3000e-004**	**4.0000e-005**	**1.2000e-004**	**1.6000e-004**	**0.0000**	**0.5496**	**0.5496**	**1.7000e-004**	**0.0000**	**0.5541**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	1.0000e-004	8.5000e-004	3.5600e-003	1.0000e-005	1.6000e-004	1.0000e-005	1.7000e-004	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.5496	0.5496	1.7000e-004	0.0000	0.5541
Maximum	**1.0000e-004**	**8.5000e-004**	**3.5600e-003**	**1.0000e-005**	**1.6000e-004**	**1.0000e-005**	**1.7000e-004**	**2.0000e-005**	**1.0000e-005**	**3.0000e-005**	**0.0000**	**0.5496**	**0.5496**	**1.7000e-004**	**0.0000**	**0.5541**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**67.74**	**75.99**	**-28.06**	**0.00**	**48.39**	**92.31**	**60.47**	**50.00**	**91.67**	**81.25**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-4-2023	9-30-2023	0.0028	0.0007
		Highest	0.0028	0.0007

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.0000e-005	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.0000e-005	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/4/2023	9/4/2023	5	1	

Acres of Grading (Site Preparation Phase): 0.5

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.01

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Skid Steer Loaders	1	8.00	65	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0000e-004	3.5300e-003	2.6500e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.2000e-004	1.2000e-004	0.0000	0.5184	0.5184	1.7000e-004	0.0000	0.5226
Total	**3.0000e-004**	**3.5300e-003**	**2.6500e-003**	**1.0000e-005**	**2.7000e-004**	**1.3000e-004**	**4.0000e-004**	**3.0000e-005**	**1.2000e-004**	**1.5000e-004**	**0.0000**	**0.5184**	**0.5184**	**1.7000e-004**	**0.0000**	**0.5226**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.2000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0312	0.0312	0.0000	0.0000	0.0315
Total	**1.0000e-005**	**1.0000e-005**	**1.2000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0312**	**0.0312**	**0.0000**	**0.0000**	**0.0315**

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3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2000e-004	0.0000	1.2000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-005	8.4000e-004	3.4400e-003	1.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.5184	0.5184	1.7000e-004	0.0000	0.5226
Total	**9.0000e-005**	**8.4000e-004**	**3.4400e-003**	**1.0000e-005**	**1.2000e-004**	**1.0000e-005**	**1.3000e-004**	**1.0000e-005**	**1.0000e-005**	**2.0000e-005**	**0.0000**	**0.5184**	**0.5184**	**1.7000e-004**	**0.0000**	**0.5226**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.2000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0312	0.0312	0.0000	0.0000	0.0315
Total	**1.0000e-005**	**1.0000e-005**	**1.2000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0312**	**0.0312**	**0.0000**	**0.0000**	**0.0315**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.513608	0.056184	0.190534	0.143608	0.031407	0.007983	0.010518	0.006055	0.000837	0.000446	0.030807	0.001563	0.006450

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.0000e-005	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Unmitigated	4.0000e-005	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation

South Central Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	0.42	1000sqft	0.01	418.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on the dimensions of the temporary booster pump station. (22 feet by 19 feet = 418 square feet ground distrubance)

Construction Phase - Adjusted construction schedule to meet applicant provided schedule. Assume no paving and architectural coating for temporary pump station.

Trips and VMT - Worker trips provided by the applicant.

Grading -

Off-road Equipment - Equipment list provided by the applicant.

Construction Off-road Equipment Mitigation - Per VCAPCD Rule 55. Implemented Tier 4 final mitigation

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblFleetMix	HHD	6.1320e-003	6.0550e-003
tblFleetMix	LDA	0.52	0.51
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT2	0.19	0.19
tblFleetMix	LHD1	0.03	0.03
tblFleetMix	LHD2	7.8410e-003	7.9830e-003
tblFleetMix	MCY	0.03	0.03
tblFleetMix	MDV	0.14	0.14
tblFleetMix	MH	6.1180e-003	6.4500e-003
tblFleetMix	MHD	0.01	0.01
tblFleetMix	OBUS	8.2400e-004	8.3700e-004
tblFleetMix	SBUS	1.5440e-003	1.5630e-003
tblFleetMix	UBUS	4.4200e-004	4.4600e-004
tblLandUse	LandUseSquareFeet	420.00	418.00
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblTripsAndVMT	WorkerTripNumber	8.00	10.00
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	6.17	6.14
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	6.4060e-003	6.1290e-003
tblVehicleEF	HHD	1,034.77	1,047.01
tblVehicleEF	HHD	1,402.11	1,426.18
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.16	0.17

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.22	0.23
tblVehicleEF	HHD	2.6000e-005	3.2000e-005
tblVehicleEF	HHD	5.48	5.52
tblVehicleEF	HHD	2.85	2.92
tblVehicleEF	HHD	2.49	2.48
tblVehicleEF	HHD	3.3150e-003	3.4930e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	2.0000e-006
tblVehicleEF	HHD	3.1710e-003	3.3420e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7930e-003	8.7900e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	3.0000e-006	4.0000e-006
tblVehicleEF	HHD	1.9700e-004	2.5200e-004
tblVehicleEF	HHD	0.42	0.42
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.4000e-005	1.2600e-004
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	9.5520e-003	9.6730e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	3.0000e-006	4.0000e-006
tblVehicleEF	HHD	1.9700e-004	2.5200e-004
tblVehicleEF	HHD	0.48	0.48
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	0.12	0.12
tblVehicleEF	HHD	8.4000e-005	1.2600e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	6.08	6.05
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	5.9790e-003	5.7210e-003
tblVehicleEF	HHD	1,024.20	1,036.61
tblVehicleEF	HHD	1,402.11	1,426.18
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.16	0.16
tblVehicleEF	HHD	0.22	0.23
tblVehicleEF	HHD	2.5000e-005	3.1000e-005
tblVehicleEF	HHD	5.26	5.30
tblVehicleEF	HHD	2.74	2.81
tblVehicleEF	HHD	2.49	2.48
tblVehicleEF	HHD	2.8760e-003	3.0250e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	2.0000e-006
tblVehicleEF	HHD	2.7510e-003	2.8940e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7930e-003	8.7900e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	6.0000e-006	7.0000e-006
tblVehicleEF	HHD	1.9800e-004	2.5200e-004
tblVehicleEF	HHD	0.44	0.44
tblVehicleEF	HHD	4.0000e-006	5.0000e-006
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.2000e-005	1.2200e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	9.4530e-003	9.5760e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.0000e-006	7.0000e-006
tblVehicleEF	HHD	1.9800e-004	2.5200e-004
tblVehicleEF	HHD	0.51	0.51
tblVehicleEF	HHD	4.0000e-006	5.0000e-006
tblVehicleEF	HHD	0.12	0.12
tblVehicleEF	HHD	8.2000e-005	1.2200e-004
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	0.00	1.0000e-006
tblVehicleEF	HHD	6.30	6.27
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	6.6800e-003	6.3920e-003
tblVehicleEF	HHD	1,049.38	1,061.39
tblVehicleEF	HHD	1,402.11	1,426.18
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.17	0.17
tblVehicleEF	HHD	0.22	0.23
tblVehicleEF	HHD	2.7000e-005	3.3000e-005
tblVehicleEF	HHD	5.79	5.83
tblVehicleEF	HHD	2.82	2.89
tblVehicleEF	HHD	2.49	2.48
tblVehicleEF	HHD	3.9220e-003	4.1380e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	2.0000e-006

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	3.7520e-003	3.9590e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7930e-003	8.7900e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	2.1900e-004	2.8300e-004
tblVehicleEF	HHD	0.38	0.38
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	9.1000e-005	1.3500e-004
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	9.6880e-003	9.8080e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	2.1900e-004	2.8300e-004
tblVehicleEF	HHD	0.44	0.44
tblVehicleEF	HHD	0.12	0.12
tblVehicleEF	HHD	9.1000e-005	1.3500e-004
tblVehicleEF	LDA	1.8920e-003	2.1510e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.54	0.58
tblVehicleEF	LDA	2.15	2.23
tblVehicleEF	LDA	243.01	248.89
tblVehicleEF	LDA	51.93	53.20
tblVehicleEF	LDA	4.2670e-003	4.5780e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.18	0.19
tblVehicleEF	LDA	1.3730e-003	1.4360e-003
tblVehicleEF	LDA	1.7560e-003	1.8310e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	1.2650e-003	1.3240e-003
tblVehicleEF	LDA	1.6140e-003	1.6840e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	7.2190e-003	8.3800e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.21	0.23
tblVehicleEF	LDA	2.3550e-003	2.4310e-003
tblVehicleEF	LDA	5.0300e-004	5.2000e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.23	0.26
tblVehicleEF	LDA	2.0220e-003	2.2970e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.59	0.63
tblVehicleEF	LDA	1.79	1.85
tblVehicleEF	LDA	252.11	258.22
tblVehicleEF	LDA	51.25	52.49
tblVehicleEF	LDA	3.9500e-003	4.2360e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.16	0.17
tblVehicleEF	LDA	1.3730e-003	1.4360e-003
tblVehicleEF	LDA	1.7560e-003	1.8310e-003
tblVehicleEF	LDA	1.2650e-003	1.3240e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	1.6140e-003	1.6840e-003
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	7.6170e-003	8.8360e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.19	0.20
tblVehicleEF	LDA	2.4440e-003	2.5230e-003
tblVehicleEF	LDA	4.9700e-004	5.1300e-004
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.20	0.22
tblVehicleEF	LDA	1.8490e-003	2.1030e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.54	0.58
tblVehicleEF	LDA	2.37	2.45
tblVehicleEF	LDA	241.44	247.28
tblVehicleEF	LDA	52.33	53.61
tblVehicleEF	LDA	4.3140e-003	4.6290e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.19	0.20
tblVehicleEF	LDA	1.3730e-003	1.4360e-003
tblVehicleEF	LDA	1.7560e-003	1.8310e-003
tblVehicleEF	LDA	1.2650e-003	1.3240e-003
tblVehicleEF	LDA	1.6140e-003	1.6840e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	7.1030e-003	8.2500e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.23	0.25
tblVehicleEF	LDA	2.3400e-003	2.4160e-003
tblVehicleEF	LDA	5.0700e-004	5.2400e-004
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.25	0.27
tblVehicleEF	LDT1	4.2150e-003	4.7780e-003
tblVehicleEF	LDT1	0.07	0.07
tblVehicleEF	LDT1	0.94	1.03
tblVehicleEF	LDT1	2.37	2.46
tblVehicleEF	LDT1	293.37	299.13
tblVehicleEF	LDT1	63.65	64.92
tblVehicleEF	LDT1	6.5420e-003	7.1830e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.25	0.26
tblVehicleEF	LDT1	1.7680e-003	1.8830e-003
tblVehicleEF	LDT1	2.2640e-003	2.4020e-003
tblVehicleEF	LDT1	1.6280e-003	1.7340e-003
tblVehicleEF	LDT1	2.0810e-003	2.2080e-003
tblVehicleEF	LDT1	0.09	0.09

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.32	0.36
tblVehicleEF	LDT1	2.8440e-003	2.9230e-003
tblVehicleEF	LDT1	6.1700e-004	6.3400e-004
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.36	0.39
tblVehicleEF	LDT1	4.4800e-003	5.0750e-003
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	1.01	1.11
tblVehicleEF	LDT1	1.97	2.04
tblVehicleEF	LDT1	302.82	308.81
tblVehicleEF	LDT1	62.85	64.08
tblVehicleEF	LDT1	5.9940e-003	6.5810e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.22	0.24
tblVehicleEF	LDT1	1.7680e-003	1.8830e-003
tblVehicleEF	LDT1	2.2640e-003	2.4020e-003
tblVehicleEF	LDT1	1.6280e-003	1.7340e-003
tblVehicleEF	LDT1	2.0810e-003	2.2080e-003
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.19	0.20

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.08	0.08
tblVehicleEF	LDT1	0.28	0.31
tblVehicleEF	LDT1	2.9360e-003	3.0180e-003
tblVehicleEF	LDT1	6.0900e-004	6.2600e-004
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.08	0.08
tblVehicleEF	LDT1	0.31	0.34
tblVehicleEF	LDT1	4.1260e-003	4.6790e-003
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.93	1.02
tblVehicleEF	LDT1	2.61	2.71
tblVehicleEF	LDT1	291.74	297.46
tblVehicleEF	LDT1	64.12	65.41
tblVehicleEF	LDT1	6.6350e-003	7.2860e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.26	0.28
tblVehicleEF	LDT1	1.7680e-003	1.8830e-003
tblVehicleEF	LDT1	2.2640e-003	2.4020e-003
tblVehicleEF	LDT1	1.6280e-003	1.7340e-003
tblVehicleEF	LDT1	2.0810e-003	2.2080e-003
tblVehicleEF	LDT1	0.06	0.07
tblVehicleEF	LDT1	0.20	0.22
tblVehicleEF	LDT1	0.06	0.06

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.11	0.11
tblVehicleEF	LDT1	0.35	0.38
tblVehicleEF	LDT1	2.8280e-003	2.9070e-003
tblVehicleEF	LDT1	6.2200e-004	6.3900e-004
tblVehicleEF	LDT1	0.06	0.07
tblVehicleEF	LDT1	0.20	0.22
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.11	0.11
tblVehicleEF	LDT1	0.38	0.42
tblVehicleEF	LDT2	3.7520e-003	4.1960e-003
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.85	0.93
tblVehicleEF	LDT2	2.84	2.93
tblVehicleEF	LDT2	315.70	324.31
tblVehicleEF	LDT2	69.42	71.32
tblVehicleEF	LDT2	6.9230e-003	7.5900e-003
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.30	0.33
tblVehicleEF	LDT2	1.4500e-003	1.5020e-003
tblVehicleEF	LDT2	1.8750e-003	1.9440e-003
tblVehicleEF	LDT2	1.3350e-003	1.3830e-003
tblVehicleEF	LDT2	1.7240e-003	1.7870e-003
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.16	0.16
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.02	0.02

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.35	0.38
tblVehicleEF	LDT2	3.0600e-003	3.1690e-003
tblVehicleEF	LDT2	6.7300e-004	6.9700e-004
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.16	0.16
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.39	0.42
tblVehicleEF	LDT2	3.9870e-003	4.4550e-003
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.92	0.99
tblVehicleEF	LDT2	2.36	2.43
tblVehicleEF	LDT2	324.76	333.68
tblVehicleEF	LDT2	68.49	70.36
tblVehicleEF	LDT2	6.3830e-003	6.9960e-003
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.28	0.30
tblVehicleEF	LDT2	1.4500e-003	1.5020e-003
tblVehicleEF	LDT2	1.8750e-003	1.9440e-003
tblVehicleEF	LDT2	1.3350e-003	1.3830e-003
tblVehicleEF	LDT2	1.7240e-003	1.7870e-003
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.16	0.17
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.07

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	0.31	0.33
tblVehicleEF	LDT2	3.1480e-003	3.2600e-003
tblVehicleEF	LDT2	6.6400e-004	6.8800e-004
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.16	0.17
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.34	0.37
tblVehicleEF	LDT2	3.6740e-003	4.1100e-003
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.85	0.92
tblVehicleEF	LDT2	3.12	3.23
tblVehicleEF	LDT2	314.16	322.73
tblVehicleEF	LDT2	69.96	71.88
tblVehicleEF	LDT2	7.0010e-003	7.6770e-003
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.08	0.10
tblVehicleEF	LDT2	0.32	0.35
tblVehicleEF	LDT2	1.4500e-003	1.5020e-003
tblVehicleEF	LDT2	1.8750e-003	1.9440e-003
tblVehicleEF	LDT2	1.3350e-003	1.3830e-003
tblVehicleEF	LDT2	1.7240e-003	1.7870e-003
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.17	0.18
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.38	0.41

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	3.0450e-003	3.1530e-003
tblVehicleEF	LDT2	6.7800e-004	7.0200e-004
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.17	0.18
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.41	0.45
tblVehicleEF	LHD1	4.3940e-003	4.4830e-003
tblVehicleEF	LHD1	8.6160e-003	9.3280e-003
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.91	0.98
tblVehicleEF	LHD1	0.97	1.00
tblVehicleEF	LHD1	9.38	9.45
tblVehicleEF	LHD1	702.79	711.82
tblVehicleEF	LHD1	10.01	10.15
tblVehicleEF	LHD1	9.1000e-004	9.1200e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	1.37	1.50
tblVehicleEF	LHD1	0.28	0.29
tblVehicleEF	LHD1	1.0320e-003	1.0280e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.4500e-004	2.5500e-004
tblVehicleEF	LHD1	9.8800e-004	9.8300e-004
tblVehicleEF	LHD1	2.5240e-003	2.5230e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	2.2500e-004	2.3400e-004
tblVehicleEF	LHD1	1.9440e-003	2.0240e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2020e-003	1.2390e-003
tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	0.25	0.25
tblVehicleEF	LHD1	0.07	0.08
tblVehicleEF	LHD1	6.8340e-003	6.9220e-003
tblVehicleEF	LHD1	9.9000e-005	1.0000e-004
tblVehicleEF	LHD1	1.9440e-003	2.0240e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.2020e-003	1.2390e-003
tblVehicleEF	LHD1	0.12	0.13
tblVehicleEF	LHD1	0.25	0.25
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	4.4060e-003	4.4950e-003
tblVehicleEF	LHD1	8.7800e-003	9.5160e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.92	1.00
tblVehicleEF	LHD1	0.91	0.94
tblVehicleEF	LHD1	9.38	9.45
tblVehicleEF	LHD1	702.82	711.85
tblVehicleEF	LHD1	9.90	10.04
tblVehicleEF	LHD1	9.1300e-004	9.1500e-004
tblVehicleEF	LHD1	0.05	0.05

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	1.32	1.44
tblVehicleEF	LHD1	0.27	0.28
tblVehicleEF	LHD1	1.0320e-003	1.0280e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.4500e-004	2.5500e-004
tblVehicleEF	LHD1	9.8800e-004	9.8300e-004
tblVehicleEF	LHD1	2.5240e-003	2.5230e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	2.2500e-004	2.3400e-004
tblVehicleEF	LHD1	3.1170e-003	3.2550e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9460e-003	2.0180e-003
tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	0.24	0.24
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	6.8340e-003	6.9220e-003
tblVehicleEF	LHD1	9.8000e-005	9.9000e-005
tblVehicleEF	LHD1	3.1170e-003	3.2550e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.9460e-003	2.0180e-003
tblVehicleEF	LHD1	0.12	0.13
tblVehicleEF	LHD1	0.24	0.24
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	4.3870e-003	4.4760e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	8.5210e-003	9.2200e-003
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.90	0.97
tblVehicleEF	LHD1	1.01	1.04
tblVehicleEF	LHD1	9.38	9.45
tblVehicleEF	LHD1	702.78	711.80
tblVehicleEF	LHD1	10.07	10.22
tblVehicleEF	LHD1	9.0900e-004	9.1200e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	1.36	1.49
tblVehicleEF	LHD1	0.30	0.30
tblVehicleEF	LHD1	1.0320e-003	1.0280e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.4500e-004	2.5500e-004
tblVehicleEF	LHD1	9.8800e-004	9.8300e-004
tblVehicleEF	LHD1	2.5240e-003	2.5230e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	2.2500e-004	2.3400e-004
tblVehicleEF	LHD1	1.3340e-003	1.3850e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	8.8100e-004	9.0500e-004
tblVehicleEF	LHD1	0.10	0.10
tblVehicleEF	LHD1	0.27	0.28
tblVehicleEF	LHD1	0.08	0.08

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	6.8340e-003	6.9220e-003
tblVehicleEF	LHD1	1.0000e-004	1.0100e-004
tblVehicleEF	LHD1	1.3340e-003	1.3850e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	8.8100e-004	9.0500e-004
tblVehicleEF	LHD1	0.12	0.13
tblVehicleEF	LHD1	0.27	0.28
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD2	3.0110e-003	3.0890e-003
tblVehicleEF	LHD2	5.9010e-003	6.2600e-003
tblVehicleEF	LHD2	8.5190e-003	9.0470e-003
tblVehicleEF	LHD2	0.13	0.13
tblVehicleEF	LHD2	0.61	0.65
tblVehicleEF	LHD2	0.56	0.59
tblVehicleEF	LHD2	14.59	14.68
tblVehicleEF	LHD2	704.11	714.03
tblVehicleEF	LHD2	7.19	7.35
tblVehicleEF	LHD2	1.8700e-003	1.8760e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	1.33	1.45
tblVehicleEF	LHD2	0.18	0.19
tblVehicleEF	LHD2	1.4680e-003	1.4580e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.1500e-004	1.2000e-004
tblVehicleEF	LHD2	1.4050e-003	1.3940e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	2.7120e-003	2.7090e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	1.1000e-004
tblVehicleEF	LHD2	9.2800e-004	9.7300e-004
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2200e-004	6.3900e-004
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	1.3900e-004	1.4000e-004
tblVehicleEF	LHD2	6.7870e-003	6.8830e-003
tblVehicleEF	LHD2	7.1000e-005	7.3000e-005
tblVehicleEF	LHD2	9.2800e-004	9.7300e-004
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2200e-004	6.3900e-004
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	3.0200e-003	3.0970e-003
tblVehicleEF	LHD2	5.9520e-003	6.3180e-003
tblVehicleEF	LHD2	8.1300e-003	8.6340e-003
tblVehicleEF	LHD2	0.13	0.13
tblVehicleEF	LHD2	0.62	0.66
tblVehicleEF	LHD2	0.53	0.55
tblVehicleEF	LHD2	14.59	14.68
tblVehicleEF	LHD2	704.12	714.04
tblVehicleEF	LHD2	7.13	7.28

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	1.8710e-003	1.8770e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	1.28	1.39
tblVehicleEF	LHD2	0.17	0.18
tblVehicleEF	LHD2	1.4680e-003	1.4580e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.1500e-004	1.2000e-004
tblVehicleEF	LHD2	1.4050e-003	1.3940e-003
tblVehicleEF	LHD2	2.7120e-003	2.7090e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	1.1000e-004
tblVehicleEF	LHD2	1.4630e-003	1.5380e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0030e-003	1.0340e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	1.3900e-004	1.4000e-004
tblVehicleEF	LHD2	6.7870e-003	6.8830e-003
tblVehicleEF	LHD2	7.1000e-005	7.2000e-005
tblVehicleEF	LHD2	1.4630e-003	1.5380e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0030e-003	1.0340e-003
tblVehicleEF	LHD2	0.11	0.12

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	3.0060e-003	3.0840e-003
tblVehicleEF	LHD2	5.8710e-003	6.2260e-003
tblVehicleEF	LHD2	8.7600e-003	9.3040e-003
tblVehicleEF	LHD2	0.13	0.13
tblVehicleEF	LHD2	0.61	0.65
tblVehicleEF	LHD2	0.59	0.61
tblVehicleEF	LHD2	14.59	14.68
tblVehicleEF	LHD2	704.11	714.02
tblVehicleEF	LHD2	7.23	7.39
tblVehicleEF	LHD2	1.8690e-003	1.8750e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	1.32	1.44
tblVehicleEF	LHD2	0.19	0.20
tblVehicleEF	LHD2	1.4680e-003	1.4580e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.1500e-004	1.2000e-004
tblVehicleEF	LHD2	1.4050e-003	1.3940e-003
tblVehicleEF	LHD2	2.7120e-003	2.7090e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	1.1000e-004
tblVehicleEF	LHD2	6.4600e-004	6.7400e-004
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.5700e-004	4.6800e-004

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	1.3900e-004	1.4000e-004
tblVehicleEF	LHD2	6.7870e-003	6.8830e-003
tblVehicleEF	LHD2	7.2000e-005	7.3000e-005
tblVehicleEF	LHD2	6.4600e-004	6.7400e-004
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.5700e-004	4.6800e-004
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	MCY	0.33	0.33
tblVehicleEF	MCY	0.26	0.26
tblVehicleEF	MCY	19.84	20.16
tblVehicleEF	MCY	8.92	8.89
tblVehicleEF	MCY	210.33	210.21
tblVehicleEF	MCY	62.43	62.73
tblVehicleEF	MCY	0.07	0.07
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	1.17	1.18
tblVehicleEF	MCY	0.27	0.27
tblVehicleEF	MCY	1.9280e-003	1.9100e-003
tblVehicleEF	MCY	3.1490e-003	3.3460e-003
tblVehicleEF	MCY	1.8050e-003	1.7900e-003
tblVehicleEF	MCY	2.9700e-003	3.1600e-003
tblVehicleEF	MCY	0.92	0.92
tblVehicleEF	MCY	0.85	0.85

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MCY	0.57	0.57
tblVehicleEF	MCY	2.26	2.28
tblVehicleEF	MCY	0.79	0.81
tblVehicleEF	MCY	1.99	2.00
tblVehicleEF	MCY	2.0810e-003	2.0800e-003
tblVehicleEF	MCY	6.1800e-004	6.2100e-004
tblVehicleEF	MCY	0.92	0.92
tblVehicleEF	MCY	0.85	0.85
tblVehicleEF	MCY	0.57	0.57
tblVehicleEF	MCY	2.78	2.79
tblVehicleEF	MCY	0.79	0.81
tblVehicleEF	MCY	2.17	2.18
tblVehicleEF	MCY	0.32	0.32
tblVehicleEF	MCY	0.22	0.22
tblVehicleEF	MCY	18.46	18.73
tblVehicleEF	MCY	7.86	7.85
tblVehicleEF	MCY	207.82	207.61
tblVehicleEF	MCY	59.77	60.07
tblVehicleEF	MCY	0.06	0.06
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	0.25	0.25
tblVehicleEF	MCY	1.9280e-003	1.9100e-003
tblVehicleEF	MCY	3.1490e-003	3.3460e-003
tblVehicleEF	MCY	1.8050e-003	1.7900e-003
tblVehicleEF	MCY	2.9700e-003	3.1600e-003
tblVehicleEF	MCY	1.62	1.62
tblVehicleEF	MCY	0.90	0.91
tblVehicleEF	MCY	1.10	1.11

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MCY	2.17	2.18
tblVehicleEF	MCY	0.73	0.75
tblVehicleEF	MCY	1.69	1.70
tblVehicleEF	MCY	2.0570e-003	2.0550e-003
tblVehicleEF	MCY	5.9100e-004	5.9400e-004
tblVehicleEF	MCY	1.62	1.62
tblVehicleEF	MCY	0.90	0.91
tblVehicleEF	MCY	1.10	1.11
tblVehicleEF	MCY	2.66	2.67
tblVehicleEF	MCY	0.73	0.75
tblVehicleEF	MCY	1.84	1.85
tblVehicleEF	MCY	0.34	0.34
tblVehicleEF	MCY	0.28	0.28
tblVehicleEF	MCY	20.80	21.15
tblVehicleEF	MCY	9.60	9.57
tblVehicleEF	MCY	212.07	212.00
tblVehicleEF	MCY	64.14	64.44
tblVehicleEF	MCY	0.07	0.07
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	1.18	1.19
tblVehicleEF	MCY	0.28	0.28
tblVehicleEF	MCY	1.9280e-003	1.9100e-003
tblVehicleEF	MCY	3.1490e-003	3.3460e-003
tblVehicleEF	MCY	1.8050e-003	1.7900e-003
tblVehicleEF	MCY	2.9700e-003	3.1600e-003
tblVehicleEF	MCY	0.60	0.60
tblVehicleEF	MCY	1.05	1.07
tblVehicleEF	MCY	0.36	0.36
tblVehicleEF	MCY	2.32	2.34

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MCY	0.92	0.94
tblVehicleEF	MCY	2.18	2.19
tblVehicleEF	MCY	2.0990e-003	2.0980e-003
tblVehicleEF	MCY	6.3500e-004	6.3800e-004
tblVehicleEF	MCY	0.60	0.60
tblVehicleEF	MCY	1.05	1.07
tblVehicleEF	MCY	0.36	0.36
tblVehicleEF	MCY	2.85	2.86
tblVehicleEF	MCY	0.92	0.94
tblVehicleEF	MCY	2.37	2.39
tblVehicleEF	MDV	4.1230e-003	4.6570e-003
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.88	0.96
tblVehicleEF	MDV	3.21	3.40
tblVehicleEF	MDV	388.99	398.83
tblVehicleEF	MDV	84.30	86.53
tblVehicleEF	MDV	8.8130e-003	9.5820e-003
tblVehicleEF	MDV	0.03	0.04
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.35	0.38
tblVehicleEF	MDV	1.4960e-003	1.5600e-003
tblVehicleEF	MDV	1.8690e-003	1.9670e-003
tblVehicleEF	MDV	1.3810e-003	1.4400e-003
tblVehicleEF	MDV	1.7180e-003	1.8090e-003
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.07	0.07

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	0.41	0.45
tblVehicleEF	MDV	3.7690e-003	3.8940e-003
tblVehicleEF	MDV	8.1700e-004	8.4600e-004
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.45	0.50
tblVehicleEF	MDV	4.3840e-003	4.9430e-003
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.94	1.03
tblVehicleEF	MDV	2.66	2.81
tblVehicleEF	MDV	398.35	408.52
tblVehicleEF	MDV	83.23	85.40
tblVehicleEF	MDV	8.2250e-003	8.9290e-003
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.32	0.35
tblVehicleEF	MDV	1.4960e-003	1.5600e-003
tblVehicleEF	MDV	1.8690e-003	1.9670e-003
tblVehicleEF	MDV	1.3810e-003	1.4400e-003
tblVehicleEF	MDV	1.7180e-003	1.8090e-003
tblVehicleEF	MDV	0.12	0.13
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.13	0.14
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.36	0.40

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	3.8590e-003	3.9890e-003
tblVehicleEF	MDV	8.0700e-004	8.3500e-004
tblVehicleEF	MDV	0.12	0.13
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.13	0.14
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.40	0.43
tblVehicleEF	MDV	4.0380e-003	4.5660e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.87	0.95
tblVehicleEF	MDV	3.53	3.74
tblVehicleEF	MDV	387.41	397.20
tblVehicleEF	MDV	84.92	87.19
tblVehicleEF	MDV	8.9000e-003	9.6800e-003
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.37	0.40
tblVehicleEF	MDV	1.4960e-003	1.5600e-003
tblVehicleEF	MDV	1.8690e-003	1.9670e-003
tblVehicleEF	MDV	1.3810e-003	1.4400e-003
tblVehicleEF	MDV	1.7180e-003	1.8090e-003
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.17	0.18
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.44	0.49
tblVehicleEF	MDV	3.7530e-003	3.8780e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	8.2300e-004	8.5200e-004
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.17	0.18
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.49	0.53
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.28	1.44
tblVehicleEF	MH	2.05	2.14
tblVehicleEF	MH	1,507.51	1,527.26
tblVehicleEF	MH	18.41	18.86
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.66	1.68
tblVehicleEF	MH	0.25	0.25
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.4300e-004	2.5600e-004
tblVehicleEF	MH	3.2940e-003	3.2880e-003
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.2300e-004	2.3500e-004
tblVehicleEF	MH	0.71	0.75
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.33	0.34
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.10

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.8200e-004	1.8700e-004
tblVehicleEF	MH	0.71	0.75
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.33	0.34
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.32	1.49
tblVehicleEF	MH	1.91	1.99
tblVehicleEF	MH	1,507.57	1,527.34
tblVehicleEF	MH	18.17	18.60
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	1.57	1.60
tblVehicleEF	MH	0.23	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.4300e-004	2.5600e-004
tblVehicleEF	MH	3.2940e-003	3.2880e-003
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.2300e-004	2.3500e-004
tblVehicleEF	MH	1.10	1.17
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.52	0.55
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.02	0.02

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.09	0.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.8000e-004	1.8400e-004
tblVehicleEF	MH	1.10	1.17
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.52	0.55
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.26	1.42
tblVehicleEF	MH	2.13	2.22
tblVehicleEF	MH	1,507.46	1,527.22
tblVehicleEF	MH	18.55	19.00
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.65	1.68
tblVehicleEF	MH	0.26	0.26
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.4300e-004	2.5600e-004
tblVehicleEF	MH	3.2940e-003	3.2880e-003
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.2300e-004	2.3500e-004
tblVehicleEF	MH	0.51	0.54
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.24	0.25
tblVehicleEF	MH	0.07	0.08

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.8400e-004	1.8800e-004
tblVehicleEF	MH	0.51	0.54
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.24	0.25
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.11	0.11
tblVehicleEF	MHD	3.2810e-003	3.3490e-003
tblVehicleEF	MHD	2.0190e-003	2.3440e-003
tblVehicleEF	MHD	9.1410e-003	9.7650e-003
tblVehicleEF	MHD	0.36	0.37
tblVehicleEF	MHD	0.26	0.30
tblVehicleEF	MHD	1.08	1.17
tblVehicleEF	MHD	68.31	69.46
tblVehicleEF	MHD	1,019.09	1,034.77
tblVehicleEF	MHD	8.80	9.28
tblVehicleEF	MHD	9.8740e-003	0.01
tblVehicleEF	MHD	0.13	0.14
tblVehicleEF	MHD	6.6810e-003	6.8530e-003
tblVehicleEF	MHD	0.40	0.42
tblVehicleEF	MHD	1.44	1.45
tblVehicleEF	MHD	1.70	1.68
tblVehicleEF	MHD	3.8000e-004	4.3900e-004
tblVehicleEF	MHD	8.9210e-003	8.9900e-003
tblVehicleEF	MHD	1.0400e-004	1.1100e-004
tblVehicleEF	MHD	3.6300e-004	4.2000e-004

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	8.5300e-003	8.5960e-003
tblVehicleEF	MHD	9.6000e-005	1.0200e-004
tblVehicleEF	MHD	3.7300e-004	4.1100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.4700e-004	2.6700e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	6.4800e-004	6.5900e-004
tblVehicleEF	MHD	9.7110e-003	9.8620e-003
tblVehicleEF	MHD	8.7000e-005	9.2000e-005
tblVehicleEF	MHD	3.7300e-004	4.1100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.4700e-004	2.6700e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.06
tblVehicleEF	MHD	3.0880e-003	3.1480e-003
tblVehicleEF	MHD	2.0630e-003	2.3970e-003
tblVehicleEF	MHD	8.7090e-003	9.3010e-003
tblVehicleEF	MHD	0.30	0.30
tblVehicleEF	MHD	0.26	0.30
tblVehicleEF	MHD	1.01	1.10
tblVehicleEF	MHD	68.45	69.70
tblVehicleEF	MHD	1,019.09	1,034.78
tblVehicleEF	MHD	8.68	9.15
tblVehicleEF	MHD	9.8530e-003	0.01

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	0.13	0.14
tblVehicleEF	MHD	6.4510e-003	6.6180e-003
tblVehicleEF	MHD	0.40	0.42
tblVehicleEF	MHD	1.38	1.39
tblVehicleEF	MHD	1.70	1.68
tblVehicleEF	MHD	3.2300e-004	3.7300e-004
tblVehicleEF	MHD	8.9210e-003	8.9900e-003
tblVehicleEF	MHD	1.0400e-004	1.1100e-004
tblVehicleEF	MHD	3.0900e-004	3.5700e-004
tblVehicleEF	MHD	8.5300e-003	8.5960e-003
tblVehicleEF	MHD	9.6000e-005	1.0200e-004
tblVehicleEF	MHD	5.9900e-004	6.6300e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.0600e-004	4.4100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	6.4900e-004	6.6100e-004
tblVehicleEF	MHD	9.7120e-003	9.8620e-003
tblVehicleEF	MHD	8.6000e-005	9.1000e-005
tblVehicleEF	MHD	5.9900e-004	6.6300e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.0600e-004	4.4100e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.06
tblVehicleEF	MHD	3.4680e-003	3.5400e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	1.9930e-003	2.3130e-003
tblVehicleEF	MHD	9.4030e-003	0.01
tblVehicleEF	MHD	0.42	0.43
tblVehicleEF	MHD	0.25	0.29
tblVehicleEF	MHD	1.13	1.23
tblVehicleEF	MHD	68.25	69.27
tblVehicleEF	MHD	1,019.08	1,034.76
tblVehicleEF	MHD	8.88	9.37
tblVehicleEF	MHD	9.9080e-003	0.01
tblVehicleEF	MHD	0.13	0.14
tblVehicleEF	MHD	6.8910e-003	7.0690e-003
tblVehicleEF	MHD	0.41	0.43
tblVehicleEF	MHD	1.42	1.44
tblVehicleEF	MHD	1.70	1.69
tblVehicleEF	MHD	4.5800e-004	5.3000e-004
tblVehicleEF	MHD	8.9210e-003	8.9900e-003
tblVehicleEF	MHD	1.0400e-004	1.1100e-004
tblVehicleEF	MHD	4.3800e-004	5.0700e-004
tblVehicleEF	MHD	8.5300e-003	8.5960e-003
tblVehicleEF	MHD	9.6000e-005	1.0200e-004
tblVehicleEF	MHD	2.5600e-004	2.8100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.8000e-004	1.9300e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	6.4700e-004	6.5700e-004
tblVehicleEF	MHD	9.7110e-003	9.8620e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	8.8000e-005	9.3000e-005
tblVehicleEF	MHD	2.5600e-004	2.8100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.8000e-004	1.9300e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	OBUS	7.9900e-003	8.0370e-003
tblVehicleEF	OBUS	7.5690e-003	8.7220e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.50	0.49
tblVehicleEF	OBUS	0.89	1.03
tblVehicleEF	OBUS	2.72	2.81
tblVehicleEF	OBUS	70.02	68.39
tblVehicleEF	OBUS	1,394.70	1,421.03
tblVehicleEF	OBUS	20.09	20.60
tblVehicleEF	OBUS	8.9990e-003	8.6950e-003
tblVehicleEF	OBUS	0.11	0.11
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.26	0.25
tblVehicleEF	OBUS	1.26	1.25
tblVehicleEF	OBUS	0.82	0.80
tblVehicleEF	OBUS	8.5000e-005	8.1000e-005
tblVehicleEF	OBUS	6.9550e-003	6.6020e-003
tblVehicleEF	OBUS	2.0400e-004	2.0900e-004
tblVehicleEF	OBUS	8.1000e-005	7.8000e-005
tblVehicleEF	OBUS	6.6370e-003	6.2990e-003
tblVehicleEF	OBUS	1.8800e-004	1.9200e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	1.6770e-003	1.7310e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	9.0800e-004	9.2500e-004
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	6.6800e-004	6.5300e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.9900e-004	2.0400e-004
tblVehicleEF	OBUS	1.6770e-003	1.7310e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	9.0800e-004	9.2500e-004
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.14	0.14
tblVehicleEF	OBUS	8.0580e-003	8.1030e-003
tblVehicleEF	OBUS	7.7810e-003	8.9710e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.50	0.49
tblVehicleEF	OBUS	0.92	1.05
tblVehicleEF	OBUS	2.53	2.62
tblVehicleEF	OBUS	69.26	67.66
tblVehicleEF	OBUS	1,394.74	1,421.08
tblVehicleEF	OBUS	19.77	20.27
tblVehicleEF	OBUS	8.8840e-003	8.5840e-003
tblVehicleEF	OBUS	0.11	0.11
tblVehicleEF	OBUS	0.02	0.02

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	0.25	0.24
tblVehicleEF	OBUS	1.20	1.18
tblVehicleEF	OBUS	0.80	0.78
tblVehicleEF	OBUS	7.5000e-005	7.2000e-005
tblVehicleEF	OBUS	6.9550e-003	6.6020e-003
tblVehicleEF	OBUS	2.0400e-004	2.0900e-004
tblVehicleEF	OBUS	7.2000e-005	6.9000e-005
tblVehicleEF	OBUS	6.6370e-003	6.2990e-003
tblVehicleEF	OBUS	1.8800e-004	1.9200e-004
tblVehicleEF	OBUS	2.6160e-003	2.7120e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	1.4530e-003	1.4870e-003
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	6.6100e-004	6.4600e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.9600e-004	2.0100e-004
tblVehicleEF	OBUS	2.6160e-003	2.7120e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	1.4530e-003	1.4870e-003
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.13	0.14
tblVehicleEF	OBUS	7.9130e-003	7.9630e-003
tblVehicleEF	OBUS	7.4480e-003	8.5800e-003
tblVehicleEF	OBUS	0.02	0.02

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	0.50	0.49
tblVehicleEF	OBUS	0.88	1.01
tblVehicleEF	OBUS	2.82	2.92
tblVehicleEF	OBUS	71.07	69.41
tblVehicleEF	OBUS	1,394.67	1,421.00
tblVehicleEF	OBUS	20.27	20.78
tblVehicleEF	OBUS	9.1630e-003	8.8530e-003
tblVehicleEF	OBUS	0.11	0.11
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.28	0.27
tblVehicleEF	OBUS	1.25	1.24
tblVehicleEF	OBUS	0.83	0.81
tblVehicleEF	OBUS	9.8000e-005	9.4000e-005
tblVehicleEF	OBUS	6.9550e-003	6.6020e-003
tblVehicleEF	OBUS	2.0400e-004	2.0900e-004
tblVehicleEF	OBUS	9.4000e-005	9.0000e-005
tblVehicleEF	OBUS	6.6370e-003	6.2990e-003
tblVehicleEF	OBUS	1.8800e-004	1.9200e-004
tblVehicleEF	OBUS	1.2110e-003	1.2440e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	6.7500e-004	6.8600e-004
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	6.7800e-004	6.6200e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	2.0100e-004	2.0600e-004
tblVehicleEF	OBUS	1.2110e-003	1.2440e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	6.7500e-004	6.8600e-004
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.14	0.15
tblVehicleEF	SBUS	0.06	0.06
tblVehicleEF	SBUS	8.7580e-003	9.6490e-003
tblVehicleEF	SBUS	6.3970e-003	6.4810e-003
tblVehicleEF	SBUS	2.28	2.26
tblVehicleEF	SBUS	0.79	0.87
tblVehicleEF	SBUS	0.89	0.93
tblVehicleEF	SBUS	358.06	359.37
tblVehicleEF	SBUS	1,074.49	1,081.95
tblVehicleEF	SBUS	4.74	4.81
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	5.1790e-003	5.0570e-003
tblVehicleEF	SBUS	3.89	3.96
tblVehicleEF	SBUS	4.78	4.94
tblVehicleEF	SBUS	0.65	0.61
tblVehicleEF	SBUS	3.9690e-003	4.2250e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.2000e-005	3.3000e-005
tblVehicleEF	SBUS	3.7970e-003	4.0430e-003
tblVehicleEF	SBUS	2.6630e-003	2.6610e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	2.9000e-005	3.0000e-005

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	1.0280e-003	1.0980e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.26	0.26
tblVehicleEF	SBUS	5.4200e-004	5.5100e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4100e-003	3.4220e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.7000e-005	4.8000e-005
tblVehicleEF	SBUS	1.0280e-003	1.0980e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.38	0.37
tblVehicleEF	SBUS	5.4200e-004	5.5100e-004
tblVehicleEF	SBUS	0.12	0.13
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.06	0.06
tblVehicleEF	SBUS	8.9030e-003	9.8160e-003
tblVehicleEF	SBUS	5.6780e-003	5.7510e-003
tblVehicleEF	SBUS	2.24	2.22
tblVehicleEF	SBUS	0.80	0.89
tblVehicleEF	SBUS	0.72	0.75
tblVehicleEF	SBUS	369.44	371.14
tblVehicleEF	SBUS	1,074.52	1,081.98
tblVehicleEF	SBUS	4.45	4.51
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	5.0060e-003	4.8880e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	4.00	4.07
tblVehicleEF	SBUS	4.59	4.74
tblVehicleEF	SBUS	0.65	0.61
tblVehicleEF	SBUS	3.3520e-003	3.5680e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.2000e-005	3.3000e-005
tblVehicleEF	SBUS	3.2070e-003	3.4140e-003
tblVehicleEF	SBUS	2.6630e-003	2.6610e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	2.9000e-005	3.0000e-005
tblVehicleEF	SBUS	1.5850e-003	1.7070e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.26	0.26
tblVehicleEF	SBUS	8.2800e-004	8.5000e-004
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.5180e-003	3.5340e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.4000e-005	4.5000e-005
tblVehicleEF	SBUS	1.5850e-003	1.7070e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.38	0.37
tblVehicleEF	SBUS	8.2800e-004	8.5000e-004
tblVehicleEF	SBUS	0.12	0.13
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.06	0.06

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	8.6810e-003	9.5600e-003
tblVehicleEF	SBUS	6.7490e-003	6.8370e-003
tblVehicleEF	SBUS	2.34	2.31
tblVehicleEF	SBUS	0.78	0.86
tblVehicleEF	SBUS	0.98	1.02
tblVehicleEF	SBUS	342.35	343.13
tblVehicleEF	SBUS	1,074.48	1,081.93
tblVehicleEF	SBUS	4.88	4.95
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	5.3330e-003	5.2070e-003
tblVehicleEF	SBUS	3.75	3.81
tblVehicleEF	SBUS	4.73	4.89
tblVehicleEF	SBUS	0.66	0.62
tblVehicleEF	SBUS	4.8210e-003	5.1330e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.2000e-005	3.3000e-005
tblVehicleEF	SBUS	4.6120e-003	4.9110e-003
tblVehicleEF	SBUS	2.6630e-003	2.6610e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	2.9000e-005	3.0000e-005
tblVehicleEF	SBUS	7.5500e-004	8.0400e-004
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.26	0.26
tblVehicleEF	SBUS	4.1300e-004	4.1900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.04	0.04

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	3.2620e-003	3.2690e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.8000e-005	4.9000e-005
tblVehicleEF	SBUS	7.5500e-004	8.0400e-004
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.38	0.38
tblVehicleEF	SBUS	4.1300e-004	4.1900e-004
tblVehicleEF	SBUS	0.12	0.13
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	UBUS	1.69	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	12.85	12.68
tblVehicleEF	UBUS	1.35	1.35
tblVehicleEF	UBUS	1,572.92	1,581.14
tblVehicleEF	UBUS	15.19	15.29
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.50	0.57
tblVehicleEF	UBUS	0.15	0.15
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5100e-003	4.4900e-003
tblVehicleEF	UBUS	1.4900e-004	1.4500e-004
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	6.2400e-003	6.2410e-003
tblVehicleEF	UBUS	4.3010e-003	4.2820e-003
tblVehicleEF	UBUS	1.3700e-004	1.3300e-004
tblVehicleEF	UBUS	6.8000e-004	6.2100e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	9.7270e-003	8.5820e-003
tblVehicleEF	UBUS	5.3300e-004	4.7800e-004
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	2.4830e-003	2.1230e-003
tblVehicleEF	UBUS	0.08	0.07
tblVehicleEF	UBUS	9.5600e-003	9.7130e-003
tblVehicleEF	UBUS	1.5000e-004	1.5100e-004
tblVehicleEF	UBUS	6.8000e-004	6.2100e-004
tblVehicleEF	UBUS	9.7270e-003	8.5820e-003
tblVehicleEF	UBUS	5.3300e-004	4.7800e-004
tblVehicleEF	UBUS	1.74	1.71
tblVehicleEF	UBUS	2.4830e-003	2.1230e-003
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	1.69	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	12.85	12.68
tblVehicleEF	UBUS	1.15	1.16
tblVehicleEF	UBUS	1,572.93	1,581.15
tblVehicleEF	UBUS	14.86	14.96
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.50	0.56
tblVehicleEF	UBUS	0.14	0.14
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5100e-003	4.4900e-003
tblVehicleEF	UBUS	1.4900e-004	1.4500e-004
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	6.2400e-003	6.2410e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	4.3010e-003	4.2820e-003
tblVehicleEF	UBUS	1.3700e-004	1.3300e-004
tblVehicleEF	UBUS	1.0570e-003	9.7200e-004
tblVehicleEF	UBUS	0.01	8.9120e-003
tblVehicleEF	UBUS	8.9500e-004	8.0700e-004
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	2.2050e-003	1.8900e-003
tblVehicleEF	UBUS	0.07	0.07
tblVehicleEF	UBUS	9.5600e-003	9.7130e-003
tblVehicleEF	UBUS	1.4700e-004	1.4800e-004
tblVehicleEF	UBUS	1.0570e-003	9.7200e-004
tblVehicleEF	UBUS	0.01	8.9120e-003
tblVehicleEF	UBUS	8.9500e-004	8.0700e-004
tblVehicleEF	UBUS	1.74	1.71
tblVehicleEF	UBUS	2.2050e-003	1.8900e-003
tblVehicleEF	UBUS	0.08	0.07
tblVehicleEF	UBUS	1.69	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	12.85	12.68
tblVehicleEF	UBUS	1.46	1.47
tblVehicleEF	UBUS	1,572.92	1,581.14
tblVehicleEF	UBUS	15.39	15.49
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.50	0.57
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5100e-003	4.4900e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	1.4900e-004	1.4500e-004
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	6.2400e-003	6.2410e-003
tblVehicleEF	UBUS	4.3010e-003	4.2820e-003
tblVehicleEF	UBUS	1.3700e-004	1.3300e-004
tblVehicleEF	UBUS	4.9100e-004	4.4600e-004
tblVehicleEF	UBUS	0.01	9.1860e-003
tblVehicleEF	UBUS	3.8400e-004	3.4300e-004
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	3.0840e-003	2.6240e-003
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	9.5600e-003	9.7130e-003
tblVehicleEF	UBUS	1.5200e-004	1.5300e-004
tblVehicleEF	UBUS	4.9100e-004	4.4600e-004
tblVehicleEF	UBUS	0.01	9.1860e-003
tblVehicleEF	UBUS	3.8400e-004	3.4300e-004
tblVehicleEF	UBUS	1.74	1.71
tblVehicleEF	UBUS	3.0840e-003	2.6240e-003
tblVehicleEF	UBUS	0.09	0.09

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.6288	7.0720	5.5561	0.0125	0.6124	0.2562	0.8686	0.0790	0.2357	0.3148	0.0000	1,213.8610	1,213.8610	0.3717	1.9200e-003	1,223.7264
Maximum	**0.6288**	**7.0720**	**5.5561**	**0.0125**	**0.6124**	**0.2562**	**0.8686**	**0.0790**	**0.2357**	**0.3148**	**0.0000**	**1,213.8610**	**1,213.8610**	**0.3717**	**1.9200e-003**	**1,223.7264**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.1989	1.6970	7.1332	0.0125	0.3208	0.0197	0.3405	0.0476	0.0197	0.0672	0.0000	1,213.8610	1,213.8610	0.3717	1.9200e-003	1,223.7264
Maximum	**0.1989**	**1.6970**	**7.1332**	**0.0125**	**0.3208**	**0.0197**	**0.3405**	**0.0476**	**0.0197**	**0.0672**	**0.0000**	**1,213.8610**	**1,213.8610**	**0.3717**	**1.9200e-003**	**1,223.7264**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**68.37**	**76.00**	**-28.38**	**0.00**	**47.62**	**92.31**	**60.81**	**39.84**	**91.66**	**78.65**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3000e-004	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.3000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0000**	**1.0000e-004**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3000e-004	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.3000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0000**	**1.0000e-004**

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/4/2023	9/4/2023	5	1	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.01

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Skid Steer Loaders	1	8.00	65	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5999	7.0534	5.3093	0.0118		0.2558	0.2558		0.2354	0.2354		1,142.9179	1,142.9179	0.3696		1,152.1590
Total	**0.5999**	**7.0534**	**5.3093**	**0.0118**	**0.5303**	**0.2558**	**0.7861**	**0.0573**	**0.2354**	**0.2926**		**1,142.9179**	**1,142.9179**	**0.3696**		**1,152.1590**

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0289	0.0186	0.2468	6.9000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9432	70.9432	2.0900e-003	1.9200e-003	71.5675
Total	**0.0289**	**0.0186**	**0.2468**	**6.9000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**70.9432**	**70.9432**	**2.0900e-003**	**1.9200e-003**	**71.5675**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	0.1700	1.6784	6.8864	0.0118		0.0193	0.0193		0.0193	0.0193	0.0000	1,142.9179	1,142.9179	0.3696		1,152.1590
Total	**0.1700**	**1.6784**	**6.8864**	**0.0118**	**0.2386**	**0.0193**	**0.2579**	**0.0258**	**0.0193**	**0.0450**	**0.0000**	**1,142.9179**	**1,142.9179**	**0.3696**		**1,152.1590**

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0289	0.0186	0.2468	6.9000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9432	70.9432	2.0900e-003	1.9200e-003	71.5675
Total	**0.0289**	**0.0186**	**0.2468**	**6.9000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**70.9432**	**70.9432**	**2.0900e-003**	**1.9200e-003**	**71.5675**

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.513608	0.056184	0.190534	0.143608	0.031407	0.007983	0.010518	0.006055	0.000837	0.000446	0.030807	0.001563	0.006450

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3000e-004	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004
Unmitigated	2.3000e-004	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.0000e-005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004
Total	**2.3000e-004**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**9.0000e-005**	**9.0000e-005**	**0.0000**		**1.0000e-004**

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.0000e-005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004
Total	**2.3000e-004**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**9.0000e-005**	**9.0000e-005**	**0.0000**		**1.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation

South Central Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	0.42	1000sqft	0.01	418.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on the dimensions of the temporary booster pump station. (22 feet by 19 feet = 418 square feet ground distrubance)

Construction Phase - Adjusted construction schedule to meet applicant provided schedule. Assume no paving and architectural coating for temporary pump station.

Trips and VMT - Worker trips provided by the applicant.

Grading -

Off-road Equipment - Equipment list provided by the applicant.

Construction Off-road Equipment Mitigation - Per VCAPCD Rule 55. Implemented Tier 4 final mitigation

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblFleetMix	HHD	6.1320e-003	6.0550e-003
tblFleetMix	LDA	0.52	0.51
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT2	0.19	0.19
tblFleetMix	LHD1	0.03	0.03
tblFleetMix	LHD2	7.8410e-003	7.9830e-003
tblFleetMix	MCY	0.03	0.03
tblFleetMix	MDV	0.14	0.14
tblFleetMix	MH	6.1180e-003	6.4500e-003
tblFleetMix	MHD	0.01	0.01
tblFleetMix	OBUS	8.2400e-004	8.3700e-004
tblFleetMix	SBUS	1.5440e-003	1.5630e-003
tblFleetMix	UBUS	4.4200e-004	4.4600e-004
tblLandUse	LandUseSquareFeet	420.00	418.00
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblTripsAndVMT	WorkerTripNumber	8.00	10.00
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	6.17	6.14
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	6.4060e-003	6.1290e-003
tblVehicleEF	HHD	1,034.77	1,047.01
tblVehicleEF	HHD	1,402.11	1,426.18
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.16	0.17

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.22	0.23
tblVehicleEF	HHD	2.6000e-005	3.2000e-005
tblVehicleEF	HHD	5.48	5.52
tblVehicleEF	HHD	2.85	2.92
tblVehicleEF	HHD	2.49	2.48
tblVehicleEF	HHD	3.3150e-003	3.4930e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	2.0000e-006
tblVehicleEF	HHD	3.1710e-003	3.3420e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7930e-003	8.7900e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	3.0000e-006	4.0000e-006
tblVehicleEF	HHD	1.9700e-004	2.5200e-004
tblVehicleEF	HHD	0.42	0.42
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.4000e-005	1.2600e-004
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	9.5520e-003	9.6730e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	3.0000e-006	4.0000e-006
tblVehicleEF	HHD	1.9700e-004	2.5200e-004
tblVehicleEF	HHD	0.48	0.48
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	0.12	0.12
tblVehicleEF	HHD	8.4000e-005	1.2600e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	6.08	6.05
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	5.9790e-003	5.7210e-003
tblVehicleEF	HHD	1,024.20	1,036.61
tblVehicleEF	HHD	1,402.11	1,426.18
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.16	0.16
tblVehicleEF	HHD	0.22	0.23
tblVehicleEF	HHD	2.5000e-005	3.1000e-005
tblVehicleEF	HHD	5.26	5.30
tblVehicleEF	HHD	2.74	2.81
tblVehicleEF	HHD	2.49	2.48
tblVehicleEF	HHD	2.8760e-003	3.0250e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	2.0000e-006
tblVehicleEF	HHD	2.7510e-003	2.8940e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7930e-003	8.7900e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	6.0000e-006	7.0000e-006
tblVehicleEF	HHD	1.9800e-004	2.5200e-004
tblVehicleEF	HHD	0.44	0.44
tblVehicleEF	HHD	4.0000e-006	5.0000e-006
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.2000e-005	1.2200e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	9.4530e-003	9.5760e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.0000e-006	7.0000e-006
tblVehicleEF	HHD	1.9800e-004	2.5200e-004
tblVehicleEF	HHD	0.51	0.51
tblVehicleEF	HHD	4.0000e-006	5.0000e-006
tblVehicleEF	HHD	0.12	0.12
tblVehicleEF	HHD	8.2000e-005	1.2200e-004
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	0.00	1.0000e-006
tblVehicleEF	HHD	6.30	6.27
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	6.6800e-003	6.3920e-003
tblVehicleEF	HHD	1,049.38	1,061.39
tblVehicleEF	HHD	1,402.11	1,426.18
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.17	0.17
tblVehicleEF	HHD	0.22	0.23
tblVehicleEF	HHD	2.7000e-005	3.3000e-005
tblVehicleEF	HHD	5.79	5.83
tblVehicleEF	HHD	2.82	2.89
tblVehicleEF	HHD	2.49	2.48
tblVehicleEF	HHD	3.9220e-003	4.1380e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	2.0000e-006

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	3.7520e-003	3.9590e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7930e-003	8.7900e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	2.1900e-004	2.8300e-004
tblVehicleEF	HHD	0.38	0.38
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	9.1000e-005	1.3500e-004
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	9.6880e-003	9.8080e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	2.0000e-006	3.0000e-006
tblVehicleEF	HHD	2.1900e-004	2.8300e-004
tblVehicleEF	HHD	0.44	0.44
tblVehicleEF	HHD	0.12	0.12
tblVehicleEF	HHD	9.1000e-005	1.3500e-004
tblVehicleEF	LDA	1.8920e-003	2.1510e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.54	0.58
tblVehicleEF	LDA	2.15	2.23
tblVehicleEF	LDA	243.01	248.89
tblVehicleEF	LDA	51.93	53.20
tblVehicleEF	LDA	4.2670e-003	4.5780e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.18	0.19
tblVehicleEF	LDA	1.3730e-003	1.4360e-003
tblVehicleEF	LDA	1.7560e-003	1.8310e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	1.2650e-003	1.3240e-003
tblVehicleEF	LDA	1.6140e-003	1.6840e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	7.2190e-003	8.3800e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.21	0.23
tblVehicleEF	LDA	2.3550e-003	2.4310e-003
tblVehicleEF	LDA	5.0300e-004	5.2000e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.23	0.26
tblVehicleEF	LDA	2.0220e-003	2.2970e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.59	0.63
tblVehicleEF	LDA	1.79	1.85
tblVehicleEF	LDA	252.11	258.22
tblVehicleEF	LDA	51.25	52.49
tblVehicleEF	LDA	3.9500e-003	4.2360e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.16	0.17
tblVehicleEF	LDA	1.3730e-003	1.4360e-003
tblVehicleEF	LDA	1.7560e-003	1.8310e-003
tblVehicleEF	LDA	1.2650e-003	1.3240e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	1.6140e-003	1.6840e-003
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	7.6170e-003	8.8360e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.19	0.20
tblVehicleEF	LDA	2.4440e-003	2.5230e-003
tblVehicleEF	LDA	4.9700e-004	5.1300e-004
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.20	0.22
tblVehicleEF	LDA	1.8490e-003	2.1030e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.54	0.58
tblVehicleEF	LDA	2.37	2.45
tblVehicleEF	LDA	241.44	247.28
tblVehicleEF	LDA	52.33	53.61
tblVehicleEF	LDA	4.3140e-003	4.6290e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.19	0.20
tblVehicleEF	LDA	1.3730e-003	1.4360e-003
tblVehicleEF	LDA	1.7560e-003	1.8310e-003
tblVehicleEF	LDA	1.2650e-003	1.3240e-003
tblVehicleEF	LDA	1.6140e-003	1.6840e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	7.1030e-003	8.2500e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.23	0.25
tblVehicleEF	LDA	2.3400e-003	2.4160e-003
tblVehicleEF	LDA	5.0700e-004	5.2400e-004
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.25	0.27
tblVehicleEF	LDT1	4.2150e-003	4.7780e-003
tblVehicleEF	LDT1	0.07	0.07
tblVehicleEF	LDT1	0.94	1.03
tblVehicleEF	LDT1	2.37	2.46
tblVehicleEF	LDT1	293.37	299.13
tblVehicleEF	LDT1	63.65	64.92
tblVehicleEF	LDT1	6.5420e-003	7.1830e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.25	0.26
tblVehicleEF	LDT1	1.7680e-003	1.8830e-003
tblVehicleEF	LDT1	2.2640e-003	2.4020e-003
tblVehicleEF	LDT1	1.6280e-003	1.7340e-003
tblVehicleEF	LDT1	2.0810e-003	2.2080e-003
tblVehicleEF	LDT1	0.09	0.09

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.32	0.36
tblVehicleEF	LDT1	2.8440e-003	2.9230e-003
tblVehicleEF	LDT1	6.1700e-004	6.3400e-004
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.36	0.39
tblVehicleEF	LDT1	4.4800e-003	5.0750e-003
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	1.01	1.11
tblVehicleEF	LDT1	1.97	2.04
tblVehicleEF	LDT1	302.82	308.81
tblVehicleEF	LDT1	62.85	64.08
tblVehicleEF	LDT1	5.9940e-003	6.5810e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.22	0.24
tblVehicleEF	LDT1	1.7680e-003	1.8830e-003
tblVehicleEF	LDT1	2.2640e-003	2.4020e-003
tblVehicleEF	LDT1	1.6280e-003	1.7340e-003
tblVehicleEF	LDT1	2.0810e-003	2.2080e-003
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.19	0.20

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.08	0.08
tblVehicleEF	LDT1	0.28	0.31
tblVehicleEF	LDT1	2.9360e-003	3.0180e-003
tblVehicleEF	LDT1	6.0900e-004	6.2600e-004
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.19	0.20
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.08	0.08
tblVehicleEF	LDT1	0.31	0.34
tblVehicleEF	LDT1	4.1260e-003	4.6790e-003
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.93	1.02
tblVehicleEF	LDT1	2.61	2.71
tblVehicleEF	LDT1	291.74	297.46
tblVehicleEF	LDT1	64.12	65.41
tblVehicleEF	LDT1	6.6350e-003	7.2860e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.26	0.28
tblVehicleEF	LDT1	1.7680e-003	1.8830e-003
tblVehicleEF	LDT1	2.2640e-003	2.4020e-003
tblVehicleEF	LDT1	1.6280e-003	1.7340e-003
tblVehicleEF	LDT1	2.0810e-003	2.2080e-003
tblVehicleEF	LDT1	0.06	0.07
tblVehicleEF	LDT1	0.20	0.22
tblVehicleEF	LDT1	0.06	0.06

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.11	0.11
tblVehicleEF	LDT1	0.35	0.38
tblVehicleEF	LDT1	2.8280e-003	2.9070e-003
tblVehicleEF	LDT1	6.2200e-004	6.3900e-004
tblVehicleEF	LDT1	0.06	0.07
tblVehicleEF	LDT1	0.20	0.22
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.11	0.11
tblVehicleEF	LDT1	0.38	0.42
tblVehicleEF	LDT2	3.7520e-003	4.1960e-003
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.85	0.93
tblVehicleEF	LDT2	2.84	2.93
tblVehicleEF	LDT2	315.70	324.31
tblVehicleEF	LDT2	69.42	71.32
tblVehicleEF	LDT2	6.9230e-003	7.5900e-003
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.30	0.33
tblVehicleEF	LDT2	1.4500e-003	1.5020e-003
tblVehicleEF	LDT2	1.8750e-003	1.9440e-003
tblVehicleEF	LDT2	1.3350e-003	1.3830e-003
tblVehicleEF	LDT2	1.7240e-003	1.7870e-003
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.16	0.16
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.02	0.02

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.35	0.38
tblVehicleEF	LDT2	3.0600e-003	3.1690e-003
tblVehicleEF	LDT2	6.7300e-004	6.9700e-004
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.16	0.16
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.39	0.42
tblVehicleEF	LDT2	3.9870e-003	4.4550e-003
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.92	0.99
tblVehicleEF	LDT2	2.36	2.43
tblVehicleEF	LDT2	324.76	333.68
tblVehicleEF	LDT2	68.49	70.36
tblVehicleEF	LDT2	6.3830e-003	6.9960e-003
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.28	0.30
tblVehicleEF	LDT2	1.4500e-003	1.5020e-003
tblVehicleEF	LDT2	1.8750e-003	1.9440e-003
tblVehicleEF	LDT2	1.3350e-003	1.3830e-003
tblVehicleEF	LDT2	1.7240e-003	1.7870e-003
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.16	0.17
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.07

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	0.31	0.33
tblVehicleEF	LDT2	3.1480e-003	3.2600e-003
tblVehicleEF	LDT2	6.6400e-004	6.8800e-004
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.16	0.17
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.34	0.37
tblVehicleEF	LDT2	3.6740e-003	4.1100e-003
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.85	0.92
tblVehicleEF	LDT2	3.12	3.23
tblVehicleEF	LDT2	314.16	322.73
tblVehicleEF	LDT2	69.96	71.88
tblVehicleEF	LDT2	7.0010e-003	7.6770e-003
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.08	0.10
tblVehicleEF	LDT2	0.32	0.35
tblVehicleEF	LDT2	1.4500e-003	1.5020e-003
tblVehicleEF	LDT2	1.8750e-003	1.9440e-003
tblVehicleEF	LDT2	1.3350e-003	1.3830e-003
tblVehicleEF	LDT2	1.7240e-003	1.7870e-003
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.17	0.18
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.38	0.41

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	3.0450e-003	3.1530e-003
tblVehicleEF	LDT2	6.7800e-004	7.0200e-004
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.17	0.18
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.41	0.45
tblVehicleEF	LHD1	4.3940e-003	4.4830e-003
tblVehicleEF	LHD1	8.6160e-003	9.3280e-003
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.91	0.98
tblVehicleEF	LHD1	0.97	1.00
tblVehicleEF	LHD1	9.38	9.45
tblVehicleEF	LHD1	702.79	711.82
tblVehicleEF	LHD1	10.01	10.15
tblVehicleEF	LHD1	9.1000e-004	9.1200e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	1.37	1.50
tblVehicleEF	LHD1	0.28	0.29
tblVehicleEF	LHD1	1.0320e-003	1.0280e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.4500e-004	2.5500e-004
tblVehicleEF	LHD1	9.8800e-004	9.8300e-004
tblVehicleEF	LHD1	2.5240e-003	2.5230e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	2.2500e-004	2.3400e-004
tblVehicleEF	LHD1	1.9440e-003	2.0240e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2020e-003	1.2390e-003
tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	0.25	0.25
tblVehicleEF	LHD1	0.07	0.08
tblVehicleEF	LHD1	6.8340e-003	6.9220e-003
tblVehicleEF	LHD1	9.9000e-005	1.0000e-004
tblVehicleEF	LHD1	1.9440e-003	2.0240e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.2020e-003	1.2390e-003
tblVehicleEF	LHD1	0.12	0.13
tblVehicleEF	LHD1	0.25	0.25
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	4.4060e-003	4.4950e-003
tblVehicleEF	LHD1	8.7800e-003	9.5160e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.92	1.00
tblVehicleEF	LHD1	0.91	0.94
tblVehicleEF	LHD1	9.38	9.45
tblVehicleEF	LHD1	702.82	711.85
tblVehicleEF	LHD1	9.90	10.04
tblVehicleEF	LHD1	9.1300e-004	9.1500e-004
tblVehicleEF	LHD1	0.05	0.05

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	1.32	1.44
tblVehicleEF	LHD1	0.27	0.28
tblVehicleEF	LHD1	1.0320e-003	1.0280e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.4500e-004	2.5500e-004
tblVehicleEF	LHD1	9.8800e-004	9.8300e-004
tblVehicleEF	LHD1	2.5240e-003	2.5230e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	2.2500e-004	2.3400e-004
tblVehicleEF	LHD1	3.1170e-003	3.2550e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9460e-003	2.0180e-003
tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	0.24	0.24
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	6.8340e-003	6.9220e-003
tblVehicleEF	LHD1	9.8000e-005	9.9000e-005
tblVehicleEF	LHD1	3.1170e-003	3.2550e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.9460e-003	2.0180e-003
tblVehicleEF	LHD1	0.12	0.13
tblVehicleEF	LHD1	0.24	0.24
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	4.3870e-003	4.4760e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	8.5210e-003	9.2200e-003
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.90	0.97
tblVehicleEF	LHD1	1.01	1.04
tblVehicleEF	LHD1	9.38	9.45
tblVehicleEF	LHD1	702.78	711.80
tblVehicleEF	LHD1	10.07	10.22
tblVehicleEF	LHD1	9.0900e-004	9.1200e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	1.36	1.49
tblVehicleEF	LHD1	0.30	0.30
tblVehicleEF	LHD1	1.0320e-003	1.0280e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.4500e-004	2.5500e-004
tblVehicleEF	LHD1	9.8800e-004	9.8300e-004
tblVehicleEF	LHD1	2.5240e-003	2.5230e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	2.2500e-004	2.3400e-004
tblVehicleEF	LHD1	1.3340e-003	1.3850e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	8.8100e-004	9.0500e-004
tblVehicleEF	LHD1	0.10	0.10
tblVehicleEF	LHD1	0.27	0.28
tblVehicleEF	LHD1	0.08	0.08

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	6.8340e-003	6.9220e-003
tblVehicleEF	LHD1	1.0000e-004	1.0100e-004
tblVehicleEF	LHD1	1.3340e-003	1.3850e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	8.8100e-004	9.0500e-004
tblVehicleEF	LHD1	0.12	0.13
tblVehicleEF	LHD1	0.27	0.28
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD2	3.0110e-003	3.0890e-003
tblVehicleEF	LHD2	5.9010e-003	6.2600e-003
tblVehicleEF	LHD2	8.5190e-003	9.0470e-003
tblVehicleEF	LHD2	0.13	0.13
tblVehicleEF	LHD2	0.61	0.65
tblVehicleEF	LHD2	0.56	0.59
tblVehicleEF	LHD2	14.59	14.68
tblVehicleEF	LHD2	704.11	714.03
tblVehicleEF	LHD2	7.19	7.35
tblVehicleEF	LHD2	1.8700e-003	1.8760e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	1.33	1.45
tblVehicleEF	LHD2	0.18	0.19
tblVehicleEF	LHD2	1.4680e-003	1.4580e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.1500e-004	1.2000e-004
tblVehicleEF	LHD2	1.4050e-003	1.3940e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	2.7120e-003	2.7090e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	1.1000e-004
tblVehicleEF	LHD2	9.2800e-004	9.7300e-004
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2200e-004	6.3900e-004
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	1.3900e-004	1.4000e-004
tblVehicleEF	LHD2	6.7870e-003	6.8830e-003
tblVehicleEF	LHD2	7.1000e-005	7.3000e-005
tblVehicleEF	LHD2	9.2800e-004	9.7300e-004
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2200e-004	6.3900e-004
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	3.0200e-003	3.0970e-003
tblVehicleEF	LHD2	5.9520e-003	6.3180e-003
tblVehicleEF	LHD2	8.1300e-003	8.6340e-003
tblVehicleEF	LHD2	0.13	0.13
tblVehicleEF	LHD2	0.62	0.66
tblVehicleEF	LHD2	0.53	0.55
tblVehicleEF	LHD2	14.59	14.68
tblVehicleEF	LHD2	704.12	714.04
tblVehicleEF	LHD2	7.13	7.28

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	1.8710e-003	1.8770e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	1.28	1.39
tblVehicleEF	LHD2	0.17	0.18
tblVehicleEF	LHD2	1.4680e-003	1.4580e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.1500e-004	1.2000e-004
tblVehicleEF	LHD2	1.4050e-003	1.3940e-003
tblVehicleEF	LHD2	2.7120e-003	2.7090e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	1.1000e-004
tblVehicleEF	LHD2	1.4630e-003	1.5380e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0030e-003	1.0340e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	1.3900e-004	1.4000e-004
tblVehicleEF	LHD2	6.7870e-003	6.8830e-003
tblVehicleEF	LHD2	7.1000e-005	7.2000e-005
tblVehicleEF	LHD2	1.4630e-003	1.5380e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0030e-003	1.0340e-003
tblVehicleEF	LHD2	0.11	0.12

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	3.0060e-003	3.0840e-003
tblVehicleEF	LHD2	5.8710e-003	6.2260e-003
tblVehicleEF	LHD2	8.7600e-003	9.3040e-003
tblVehicleEF	LHD2	0.13	0.13
tblVehicleEF	LHD2	0.61	0.65
tblVehicleEF	LHD2	0.59	0.61
tblVehicleEF	LHD2	14.59	14.68
tblVehicleEF	LHD2	704.11	714.02
tblVehicleEF	LHD2	7.23	7.39
tblVehicleEF	LHD2	1.8690e-003	1.8750e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	1.32	1.44
tblVehicleEF	LHD2	0.19	0.20
tblVehicleEF	LHD2	1.4680e-003	1.4580e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.1500e-004	1.2000e-004
tblVehicleEF	LHD2	1.4050e-003	1.3940e-003
tblVehicleEF	LHD2	2.7120e-003	2.7090e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	1.1000e-004
tblVehicleEF	LHD2	6.4600e-004	6.7400e-004
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.5700e-004	4.6800e-004

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	1.3900e-004	1.4000e-004
tblVehicleEF	LHD2	6.7870e-003	6.8830e-003
tblVehicleEF	LHD2	7.2000e-005	7.3000e-005
tblVehicleEF	LHD2	6.4600e-004	6.7400e-004
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.5700e-004	4.6800e-004
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	MCY	0.33	0.33
tblVehicleEF	MCY	0.26	0.26
tblVehicleEF	MCY	19.84	20.16
tblVehicleEF	MCY	8.92	8.89
tblVehicleEF	MCY	210.33	210.21
tblVehicleEF	MCY	62.43	62.73
tblVehicleEF	MCY	0.07	0.07
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	1.17	1.18
tblVehicleEF	MCY	0.27	0.27
tblVehicleEF	MCY	1.9280e-003	1.9100e-003
tblVehicleEF	MCY	3.1490e-003	3.3460e-003
tblVehicleEF	MCY	1.8050e-003	1.7900e-003
tblVehicleEF	MCY	2.9700e-003	3.1600e-003
tblVehicleEF	MCY	0.92	0.92
tblVehicleEF	MCY	0.85	0.85

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MCY	0.57	0.57
tblVehicleEF	MCY	2.26	2.28
tblVehicleEF	MCY	0.79	0.81
tblVehicleEF	MCY	1.99	2.00
tblVehicleEF	MCY	2.0810e-003	2.0800e-003
tblVehicleEF	MCY	6.1800e-004	6.2100e-004
tblVehicleEF	MCY	0.92	0.92
tblVehicleEF	MCY	0.85	0.85
tblVehicleEF	MCY	0.57	0.57
tblVehicleEF	MCY	2.78	2.79
tblVehicleEF	MCY	0.79	0.81
tblVehicleEF	MCY	2.17	2.18
tblVehicleEF	MCY	0.32	0.32
tblVehicleEF	MCY	0.22	0.22
tblVehicleEF	MCY	18.46	18.73
tblVehicleEF	MCY	7.86	7.85
tblVehicleEF	MCY	207.82	207.61
tblVehicleEF	MCY	59.77	60.07
tblVehicleEF	MCY	0.06	0.06
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	0.25	0.25
tblVehicleEF	MCY	1.9280e-003	1.9100e-003
tblVehicleEF	MCY	3.1490e-003	3.3460e-003
tblVehicleEF	MCY	1.8050e-003	1.7900e-003
tblVehicleEF	MCY	2.9700e-003	3.1600e-003
tblVehicleEF	MCY	1.62	1.62
tblVehicleEF	MCY	0.90	0.91
tblVehicleEF	MCY	1.10	1.11

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MCY	2.17	2.18
tblVehicleEF	MCY	0.73	0.75
tblVehicleEF	MCY	1.69	1.70
tblVehicleEF	MCY	2.0570e-003	2.0550e-003
tblVehicleEF	MCY	5.9100e-004	5.9400e-004
tblVehicleEF	MCY	1.62	1.62
tblVehicleEF	MCY	0.90	0.91
tblVehicleEF	MCY	1.10	1.11
tblVehicleEF	MCY	2.66	2.67
tblVehicleEF	MCY	0.73	0.75
tblVehicleEF	MCY	1.84	1.85
tblVehicleEF	MCY	0.34	0.34
tblVehicleEF	MCY	0.28	0.28
tblVehicleEF	MCY	20.80	21.15
tblVehicleEF	MCY	9.60	9.57
tblVehicleEF	MCY	212.07	212.00
tblVehicleEF	MCY	64.14	64.44
tblVehicleEF	MCY	0.07	0.07
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	1.18	1.19
tblVehicleEF	MCY	0.28	0.28
tblVehicleEF	MCY	1.9280e-003	1.9100e-003
tblVehicleEF	MCY	3.1490e-003	3.3460e-003
tblVehicleEF	MCY	1.8050e-003	1.7900e-003
tblVehicleEF	MCY	2.9700e-003	3.1600e-003
tblVehicleEF	MCY	0.60	0.60
tblVehicleEF	MCY	1.05	1.07
tblVehicleEF	MCY	0.36	0.36
tblVehicleEF	MCY	2.32	2.34

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MCY	0.92	0.94
tblVehicleEF	MCY	2.18	2.19
tblVehicleEF	MCY	2.0990e-003	2.0980e-003
tblVehicleEF	MCY	6.3500e-004	6.3800e-004
tblVehicleEF	MCY	0.60	0.60
tblVehicleEF	MCY	1.05	1.07
tblVehicleEF	MCY	0.36	0.36
tblVehicleEF	MCY	2.85	2.86
tblVehicleEF	MCY	0.92	0.94
tblVehicleEF	MCY	2.37	2.39
tblVehicleEF	MDV	4.1230e-003	4.6570e-003
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.88	0.96
tblVehicleEF	MDV	3.21	3.40
tblVehicleEF	MDV	388.99	398.83
tblVehicleEF	MDV	84.30	86.53
tblVehicleEF	MDV	8.8130e-003	9.5820e-003
tblVehicleEF	MDV	0.03	0.04
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.35	0.38
tblVehicleEF	MDV	1.4960e-003	1.5600e-003
tblVehicleEF	MDV	1.8690e-003	1.9670e-003
tblVehicleEF	MDV	1.3810e-003	1.4400e-003
tblVehicleEF	MDV	1.7180e-003	1.8090e-003
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.07	0.07

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	0.41	0.45
tblVehicleEF	MDV	3.7690e-003	3.8940e-003
tblVehicleEF	MDV	8.1700e-004	8.4600e-004
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.45	0.50
tblVehicleEF	MDV	4.3840e-003	4.9430e-003
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.94	1.03
tblVehicleEF	MDV	2.66	2.81
tblVehicleEF	MDV	398.35	408.52
tblVehicleEF	MDV	83.23	85.40
tblVehicleEF	MDV	8.2250e-003	8.9290e-003
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.32	0.35
tblVehicleEF	MDV	1.4960e-003	1.5600e-003
tblVehicleEF	MDV	1.8690e-003	1.9670e-003
tblVehicleEF	MDV	1.3810e-003	1.4400e-003
tblVehicleEF	MDV	1.7180e-003	1.8090e-003
tblVehicleEF	MDV	0.12	0.13
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.13	0.14
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.36	0.40

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	3.8590e-003	3.9890e-003
tblVehicleEF	MDV	8.0700e-004	8.3500e-004
tblVehicleEF	MDV	0.12	0.13
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.13	0.14
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.40	0.43
tblVehicleEF	MDV	4.0380e-003	4.5660e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.87	0.95
tblVehicleEF	MDV	3.53	3.74
tblVehicleEF	MDV	387.41	397.20
tblVehicleEF	MDV	84.92	87.19
tblVehicleEF	MDV	8.9000e-003	9.6800e-003
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.37	0.40
tblVehicleEF	MDV	1.4960e-003	1.5600e-003
tblVehicleEF	MDV	1.8690e-003	1.9670e-003
tblVehicleEF	MDV	1.3810e-003	1.4400e-003
tblVehicleEF	MDV	1.7180e-003	1.8090e-003
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.17	0.18
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.44	0.49
tblVehicleEF	MDV	3.7530e-003	3.8780e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	8.2300e-004	8.5200e-004
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.17	0.18
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.49	0.53
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.28	1.44
tblVehicleEF	MH	2.05	2.14
tblVehicleEF	MH	1,507.51	1,527.26
tblVehicleEF	MH	18.41	18.86
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.66	1.68
tblVehicleEF	MH	0.25	0.25
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.4300e-004	2.5600e-004
tblVehicleEF	MH	3.2940e-003	3.2880e-003
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.2300e-004	2.3500e-004
tblVehicleEF	MH	0.71	0.75
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.33	0.34
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.10

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.8200e-004	1.8700e-004
tblVehicleEF	MH	0.71	0.75
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.33	0.34
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.32	1.49
tblVehicleEF	MH	1.91	1.99
tblVehicleEF	MH	1,507.57	1,527.34
tblVehicleEF	MH	18.17	18.60
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	1.57	1.60
tblVehicleEF	MH	0.23	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.4300e-004	2.5600e-004
tblVehicleEF	MH	3.2940e-003	3.2880e-003
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.2300e-004	2.3500e-004
tblVehicleEF	MH	1.10	1.17
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.52	0.55
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.02	0.02

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.09	0.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.8000e-004	1.8400e-004
tblVehicleEF	MH	1.10	1.17
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.52	0.55
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.26	1.42
tblVehicleEF	MH	2.13	2.22
tblVehicleEF	MH	1,507.46	1,527.22
tblVehicleEF	MH	18.55	19.00
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.65	1.68
tblVehicleEF	MH	0.26	0.26
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.4300e-004	2.5600e-004
tblVehicleEF	MH	3.2940e-003	3.2880e-003
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	2.2300e-004	2.3500e-004
tblVehicleEF	MH	0.51	0.54
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.24	0.25
tblVehicleEF	MH	0.07	0.08

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.8400e-004	1.8800e-004
tblVehicleEF	MH	0.51	0.54
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.24	0.25
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.11	0.11
tblVehicleEF	MHD	3.2810e-003	3.3490e-003
tblVehicleEF	MHD	2.0190e-003	2.3440e-003
tblVehicleEF	MHD	9.1410e-003	9.7650e-003
tblVehicleEF	MHD	0.36	0.37
tblVehicleEF	MHD	0.26	0.30
tblVehicleEF	MHD	1.08	1.17
tblVehicleEF	MHD	68.31	69.46
tblVehicleEF	MHD	1,019.09	1,034.77
tblVehicleEF	MHD	8.80	9.28
tblVehicleEF	MHD	9.8740e-003	0.01
tblVehicleEF	MHD	0.13	0.14
tblVehicleEF	MHD	6.6810e-003	6.8530e-003
tblVehicleEF	MHD	0.40	0.42
tblVehicleEF	MHD	1.44	1.45
tblVehicleEF	MHD	1.70	1.68
tblVehicleEF	MHD	3.8000e-004	4.3900e-004
tblVehicleEF	MHD	8.9210e-003	8.9900e-003
tblVehicleEF	MHD	1.0400e-004	1.1100e-004
tblVehicleEF	MHD	3.6300e-004	4.2000e-004

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	8.5300e-003	8.5960e-003
tblVehicleEF	MHD	9.6000e-005	1.0200e-004
tblVehicleEF	MHD	3.7300e-004	4.1100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.4700e-004	2.6700e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	6.4800e-004	6.5900e-004
tblVehicleEF	MHD	9.7110e-003	9.8620e-003
tblVehicleEF	MHD	8.7000e-005	9.2000e-005
tblVehicleEF	MHD	3.7300e-004	4.1100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.4700e-004	2.6700e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.06
tblVehicleEF	MHD	3.0880e-003	3.1480e-003
tblVehicleEF	MHD	2.0630e-003	2.3970e-003
tblVehicleEF	MHD	8.7090e-003	9.3010e-003
tblVehicleEF	MHD	0.30	0.30
tblVehicleEF	MHD	0.26	0.30
tblVehicleEF	MHD	1.01	1.10
tblVehicleEF	MHD	68.45	69.70
tblVehicleEF	MHD	1,019.09	1,034.78
tblVehicleEF	MHD	8.68	9.15
tblVehicleEF	MHD	9.8530e-003	0.01

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	0.13	0.14
tblVehicleEF	MHD	6.4510e-003	6.6180e-003
tblVehicleEF	MHD	0.40	0.42
tblVehicleEF	MHD	1.38	1.39
tblVehicleEF	MHD	1.70	1.68
tblVehicleEF	MHD	3.2300e-004	3.7300e-004
tblVehicleEF	MHD	8.9210e-003	8.9900e-003
tblVehicleEF	MHD	1.0400e-004	1.1100e-004
tblVehicleEF	MHD	3.0900e-004	3.5700e-004
tblVehicleEF	MHD	8.5300e-003	8.5960e-003
tblVehicleEF	MHD	9.6000e-005	1.0200e-004
tblVehicleEF	MHD	5.9900e-004	6.6300e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.0600e-004	4.4100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	6.4900e-004	6.6100e-004
tblVehicleEF	MHD	9.7120e-003	9.8620e-003
tblVehicleEF	MHD	8.6000e-005	9.1000e-005
tblVehicleEF	MHD	5.9900e-004	6.6300e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.0600e-004	4.4100e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.06
tblVehicleEF	MHD	3.4680e-003	3.5400e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	1.9930e-003	2.3130e-003
tblVehicleEF	MHD	9.4030e-003	0.01
tblVehicleEF	MHD	0.42	0.43
tblVehicleEF	MHD	0.25	0.29
tblVehicleEF	MHD	1.13	1.23
tblVehicleEF	MHD	68.25	69.27
tblVehicleEF	MHD	1,019.08	1,034.76
tblVehicleEF	MHD	8.88	9.37
tblVehicleEF	MHD	9.9080e-003	0.01
tblVehicleEF	MHD	0.13	0.14
tblVehicleEF	MHD	6.8910e-003	7.0690e-003
tblVehicleEF	MHD	0.41	0.43
tblVehicleEF	MHD	1.42	1.44
tblVehicleEF	MHD	1.70	1.69
tblVehicleEF	MHD	4.5800e-004	5.3000e-004
tblVehicleEF	MHD	8.9210e-003	8.9900e-003
tblVehicleEF	MHD	1.0400e-004	1.1100e-004
tblVehicleEF	MHD	4.3800e-004	5.0700e-004
tblVehicleEF	MHD	8.5300e-003	8.5960e-003
tblVehicleEF	MHD	9.6000e-005	1.0200e-004
tblVehicleEF	MHD	2.5600e-004	2.8100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.8000e-004	1.9300e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	6.4700e-004	6.5700e-004
tblVehicleEF	MHD	9.7110e-003	9.8620e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	8.8000e-005	9.3000e-005
tblVehicleEF	MHD	2.5600e-004	2.8100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.8000e-004	1.9300e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	OBUS	7.9900e-003	8.0370e-003
tblVehicleEF	OBUS	7.5690e-003	8.7220e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.50	0.49
tblVehicleEF	OBUS	0.89	1.03
tblVehicleEF	OBUS	2.72	2.81
tblVehicleEF	OBUS	70.02	68.39
tblVehicleEF	OBUS	1,394.70	1,421.03
tblVehicleEF	OBUS	20.09	20.60
tblVehicleEF	OBUS	8.9990e-003	8.6950e-003
tblVehicleEF	OBUS	0.11	0.11
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.26	0.25
tblVehicleEF	OBUS	1.26	1.25
tblVehicleEF	OBUS	0.82	0.80
tblVehicleEF	OBUS	8.5000e-005	8.1000e-005
tblVehicleEF	OBUS	6.9550e-003	6.6020e-003
tblVehicleEF	OBUS	2.0400e-004	2.0900e-004
tblVehicleEF	OBUS	8.1000e-005	7.8000e-005
tblVehicleEF	OBUS	6.6370e-003	6.2990e-003
tblVehicleEF	OBUS	1.8800e-004	1.9200e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	1.6770e-003	1.7310e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	9.0800e-004	9.2500e-004
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	6.6800e-004	6.5300e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.9900e-004	2.0400e-004
tblVehicleEF	OBUS	1.6770e-003	1.7310e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	9.0800e-004	9.2500e-004
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.14	0.14
tblVehicleEF	OBUS	8.0580e-003	8.1030e-003
tblVehicleEF	OBUS	7.7810e-003	8.9710e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.50	0.49
tblVehicleEF	OBUS	0.92	1.05
tblVehicleEF	OBUS	2.53	2.62
tblVehicleEF	OBUS	69.26	67.66
tblVehicleEF	OBUS	1,394.74	1,421.08
tblVehicleEF	OBUS	19.77	20.27
tblVehicleEF	OBUS	8.8840e-003	8.5840e-003
tblVehicleEF	OBUS	0.11	0.11
tblVehicleEF	OBUS	0.02	0.02

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	0.25	0.24
tblVehicleEF	OBUS	1.20	1.18
tblVehicleEF	OBUS	0.80	0.78
tblVehicleEF	OBUS	7.5000e-005	7.2000e-005
tblVehicleEF	OBUS	6.9550e-003	6.6020e-003
tblVehicleEF	OBUS	2.0400e-004	2.0900e-004
tblVehicleEF	OBUS	7.2000e-005	6.9000e-005
tblVehicleEF	OBUS	6.6370e-003	6.2990e-003
tblVehicleEF	OBUS	1.8800e-004	1.9200e-004
tblVehicleEF	OBUS	2.6160e-003	2.7120e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	1.4530e-003	1.4870e-003
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	6.6100e-004	6.4600e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.9600e-004	2.0100e-004
tblVehicleEF	OBUS	2.6160e-003	2.7120e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	1.4530e-003	1.4870e-003
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	0.13	0.14
tblVehicleEF	OBUS	7.9130e-003	7.9630e-003
tblVehicleEF	OBUS	7.4480e-003	8.5800e-003
tblVehicleEF	OBUS	0.02	0.02

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	0.50	0.49
tblVehicleEF	OBUS	0.88	1.01
tblVehicleEF	OBUS	2.82	2.92
tblVehicleEF	OBUS	71.07	69.41
tblVehicleEF	OBUS	1,394.67	1,421.00
tblVehicleEF	OBUS	20.27	20.78
tblVehicleEF	OBUS	9.1630e-003	8.8530e-003
tblVehicleEF	OBUS	0.11	0.11
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.28	0.27
tblVehicleEF	OBUS	1.25	1.24
tblVehicleEF	OBUS	0.83	0.81
tblVehicleEF	OBUS	9.8000e-005	9.4000e-005
tblVehicleEF	OBUS	6.9550e-003	6.6020e-003
tblVehicleEF	OBUS	2.0400e-004	2.0900e-004
tblVehicleEF	OBUS	9.4000e-005	9.0000e-005
tblVehicleEF	OBUS	6.6370e-003	6.2990e-003
tblVehicleEF	OBUS	1.8800e-004	1.9200e-004
tblVehicleEF	OBUS	1.2110e-003	1.2440e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	6.7500e-004	6.8600e-004
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	6.7800e-004	6.6200e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	2.0100e-004	2.0600e-004
tblVehicleEF	OBUS	1.2110e-003	1.2440e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	6.7500e-004	6.8600e-004
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.14	0.15
tblVehicleEF	SBUS	0.06	0.06
tblVehicleEF	SBUS	8.7580e-003	9.6490e-003
tblVehicleEF	SBUS	6.3970e-003	6.4810e-003
tblVehicleEF	SBUS	2.28	2.26
tblVehicleEF	SBUS	0.79	0.87
tblVehicleEF	SBUS	0.89	0.93
tblVehicleEF	SBUS	358.06	359.37
tblVehicleEF	SBUS	1,074.49	1,081.95
tblVehicleEF	SBUS	4.74	4.81
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	5.1790e-003	5.0570e-003
tblVehicleEF	SBUS	3.89	3.96
tblVehicleEF	SBUS	4.78	4.94
tblVehicleEF	SBUS	0.65	0.61
tblVehicleEF	SBUS	3.9690e-003	4.2250e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.2000e-005	3.3000e-005
tblVehicleEF	SBUS	3.7970e-003	4.0430e-003
tblVehicleEF	SBUS	2.6630e-003	2.6610e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	2.9000e-005	3.0000e-005

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	1.0280e-003	1.0980e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.26	0.26
tblVehicleEF	SBUS	5.4200e-004	5.5100e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4100e-003	3.4220e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.7000e-005	4.8000e-005
tblVehicleEF	SBUS	1.0280e-003	1.0980e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.38	0.37
tblVehicleEF	SBUS	5.4200e-004	5.5100e-004
tblVehicleEF	SBUS	0.12	0.13
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.06	0.06
tblVehicleEF	SBUS	8.9030e-003	9.8160e-003
tblVehicleEF	SBUS	5.6780e-003	5.7510e-003
tblVehicleEF	SBUS	2.24	2.22
tblVehicleEF	SBUS	0.80	0.89
tblVehicleEF	SBUS	0.72	0.75
tblVehicleEF	SBUS	369.44	371.14
tblVehicleEF	SBUS	1,074.52	1,081.98
tblVehicleEF	SBUS	4.45	4.51
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	5.0060e-003	4.8880e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	4.00	4.07
tblVehicleEF	SBUS	4.59	4.74
tblVehicleEF	SBUS	0.65	0.61
tblVehicleEF	SBUS	3.3520e-003	3.5680e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.2000e-005	3.3000e-005
tblVehicleEF	SBUS	3.2070e-003	3.4140e-003
tblVehicleEF	SBUS	2.6630e-003	2.6610e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	2.9000e-005	3.0000e-005
tblVehicleEF	SBUS	1.5850e-003	1.7070e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.26	0.26
tblVehicleEF	SBUS	8.2800e-004	8.5000e-004
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.5180e-003	3.5340e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.4000e-005	4.5000e-005
tblVehicleEF	SBUS	1.5850e-003	1.7070e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.38	0.37
tblVehicleEF	SBUS	8.2800e-004	8.5000e-004
tblVehicleEF	SBUS	0.12	0.13
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.06	0.06

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	8.6810e-003	9.5600e-003
tblVehicleEF	SBUS	6.7490e-003	6.8370e-003
tblVehicleEF	SBUS	2.34	2.31
tblVehicleEF	SBUS	0.78	0.86
tblVehicleEF	SBUS	0.98	1.02
tblVehicleEF	SBUS	342.35	343.13
tblVehicleEF	SBUS	1,074.48	1,081.93
tblVehicleEF	SBUS	4.88	4.95
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	5.3330e-003	5.2070e-003
tblVehicleEF	SBUS	3.75	3.81
tblVehicleEF	SBUS	4.73	4.89
tblVehicleEF	SBUS	0.66	0.62
tblVehicleEF	SBUS	4.8210e-003	5.1330e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.2000e-005	3.3000e-005
tblVehicleEF	SBUS	4.6120e-003	4.9110e-003
tblVehicleEF	SBUS	2.6630e-003	2.6610e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	2.9000e-005	3.0000e-005
tblVehicleEF	SBUS	7.5500e-004	8.0400e-004
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.26	0.26
tblVehicleEF	SBUS	4.1300e-004	4.1900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.04	0.04

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	3.2620e-003	3.2690e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.8000e-005	4.9000e-005
tblVehicleEF	SBUS	7.5500e-004	8.0400e-004
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.38	0.38
tblVehicleEF	SBUS	4.1300e-004	4.1900e-004
tblVehicleEF	SBUS	0.12	0.13
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	UBUS	1.69	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	12.85	12.68
tblVehicleEF	UBUS	1.35	1.35
tblVehicleEF	UBUS	1,572.92	1,581.14
tblVehicleEF	UBUS	15.19	15.29
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.50	0.57
tblVehicleEF	UBUS	0.15	0.15
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5100e-003	4.4900e-003
tblVehicleEF	UBUS	1.4900e-004	1.4500e-004
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	6.2400e-003	6.2410e-003
tblVehicleEF	UBUS	4.3010e-003	4.2820e-003
tblVehicleEF	UBUS	1.3700e-004	1.3300e-004
tblVehicleEF	UBUS	6.8000e-004	6.2100e-004

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	9.7270e-003	8.5820e-003
tblVehicleEF	UBUS	5.3300e-004	4.7800e-004
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	2.4830e-003	2.1230e-003
tblVehicleEF	UBUS	0.08	0.07
tblVehicleEF	UBUS	9.5600e-003	9.7130e-003
tblVehicleEF	UBUS	1.5000e-004	1.5100e-004
tblVehicleEF	UBUS	6.8000e-004	6.2100e-004
tblVehicleEF	UBUS	9.7270e-003	8.5820e-003
tblVehicleEF	UBUS	5.3300e-004	4.7800e-004
tblVehicleEF	UBUS	1.74	1.71
tblVehicleEF	UBUS	2.4830e-003	2.1230e-003
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	1.69	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	12.85	12.68
tblVehicleEF	UBUS	1.15	1.16
tblVehicleEF	UBUS	1,572.93	1,581.15
tblVehicleEF	UBUS	14.86	14.96
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.50	0.56
tblVehicleEF	UBUS	0.14	0.14
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5100e-003	4.4900e-003
tblVehicleEF	UBUS	1.4900e-004	1.4500e-004
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	6.2400e-003	6.2410e-003

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	4.3010e-003	4.2820e-003
tblVehicleEF	UBUS	1.3700e-004	1.3300e-004
tblVehicleEF	UBUS	1.0570e-003	9.7200e-004
tblVehicleEF	UBUS	0.01	8.9120e-003
tblVehicleEF	UBUS	8.9500e-004	8.0700e-004
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	2.2050e-003	1.8900e-003
tblVehicleEF	UBUS	0.07	0.07
tblVehicleEF	UBUS	9.5600e-003	9.7130e-003
tblVehicleEF	UBUS	1.4700e-004	1.4800e-004
tblVehicleEF	UBUS	1.0570e-003	9.7200e-004
tblVehicleEF	UBUS	0.01	8.9120e-003
tblVehicleEF	UBUS	8.9500e-004	8.0700e-004
tblVehicleEF	UBUS	1.74	1.71
tblVehicleEF	UBUS	2.2050e-003	1.8900e-003
tblVehicleEF	UBUS	0.08	0.07
tblVehicleEF	UBUS	1.69	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	12.85	12.68
tblVehicleEF	UBUS	1.46	1.47
tblVehicleEF	UBUS	1,572.92	1,581.14
tblVehicleEF	UBUS	15.39	15.49
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.50	0.57
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5100e-003	4.4900e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	1.4900e-004	1.4500e-004
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	6.2400e-003	6.2410e-003
tblVehicleEF	UBUS	4.3010e-003	4.2820e-003
tblVehicleEF	UBUS	1.3700e-004	1.3300e-004
tblVehicleEF	UBUS	4.9100e-004	4.4600e-004
tblVehicleEF	UBUS	0.01	9.1860e-003
tblVehicleEF	UBUS	3.8400e-004	3.4300e-004
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	3.0840e-003	2.6240e-003
tblVehicleEF	UBUS	0.08	0.08
tblVehicleEF	UBUS	9.5600e-003	9.7130e-003
tblVehicleEF	UBUS	1.5200e-004	1.5300e-004
tblVehicleEF	UBUS	4.9100e-004	4.4600e-004
tblVehicleEF	UBUS	0.01	9.1860e-003
tblVehicleEF	UBUS	3.8400e-004	3.4300e-004
tblVehicleEF	UBUS	1.74	1.71
tblVehicleEF	UBUS	3.0840e-003	2.6240e-003
tblVehicleEF	UBUS	0.09	0.09

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.6314	7.0748	5.5547	0.0125	0.6124	0.2562	0.8686	0.0790	0.2357	0.3148	0.0000	1,211.2354	1,211.2354	0.3719	2.1100e-003	1,221.1635
Maximum	**0.6314**	**7.0748**	**5.5547**	**0.0125**	**0.6124**	**0.2562**	**0.8686**	**0.0790**	**0.2357**	**0.3148**	**0.0000**	**1,211.2354**	**1,211.2354**	**0.3719**	**2.1100e-003**	**1,221.1635**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.2015	1.6998	7.1317	0.0125	0.3208	0.0197	0.3405	0.0476	0.0197	0.0672	0.0000	1,211.2354	1,211.2354	0.3719	2.1100e-003	1,221.1635
Maximum	**0.2015**	**1.6998**	**7.1317**	**0.0125**	**0.3208**	**0.0197**	**0.3405**	**0.0476**	**0.0197**	**0.0672**	**0.0000**	**1,211.2354**	**1,211.2354**	**0.3719**	**2.1100e-003**	**1,221.1635**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**68.08**	**75.97**	**-28.39**	**0.00**	**47.62**	**92.31**	**60.81**	**39.84**	**91.66**	**78.65**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3000e-004	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.3000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0000**	**1.0000e-004**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3000e-004	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.3000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0000**	**1.0000e-004**

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/4/2023	9/4/2023	5	1	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.01

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Skid Steer Loaders	1	8.00	65	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5999	7.0534	5.3093	0.0118		0.2558	0.2558		0.2354	0.2354		1,142.9179	1,142.9179	0.3696		1,152.1590
Total	**0.5999**	**7.0534**	**5.3093**	**0.0118**	**0.5303**	**0.2558**	**0.7861**	**0.0573**	**0.2354**	**0.2926**		**1,142.9179**	**1,142.9179**	**0.3696**		**1,152.1590**

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0315	0.0214	0.2453	6.7000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		68.3175	68.3175	2.2700e-003	2.1100e-003	69.0046
Total	**0.0315**	**0.0214**	**0.2453**	**6.7000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**68.3175**	**68.3175**	**2.2700e-003**	**2.1100e-003**	**69.0046**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	0.1700	1.6784	6.8864	0.0118		0.0193	0.0193		0.0193	0.0193	0.0000	1,142.9179	1,142.9179	0.3696		1,152.1590
Total	**0.1700**	**1.6784**	**6.8864**	**0.0118**	**0.2386**	**0.0193**	**0.2579**	**0.0258**	**0.0193**	**0.0450**	**0.0000**	**1,142.9179**	**1,142.9179**	**0.3696**		**1,152.1590**

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0315	0.0214	0.2453	6.7000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		68.3175	68.3175	2.2700e-003	2.1100e-003	69.0046
Total	**0.0315**	**0.0214**	**0.2453**	**6.7000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**68.3175**	**68.3175**	**2.2700e-003**	**2.1100e-003**	**69.0046**

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.513608	0.056184	0.190534	0.143608	0.031407	0.007983	0.010518	0.006055	0.000837	0.000446	0.030807	0.001563	0.006450

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3000e-004	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004
Unmitigated	2.3000e-004	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.0000e-005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004
Total	**2.3000e-004**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**9.0000e-005**	**9.0000e-005**	**0.0000**		**1.0000e-004**

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.0000e-005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		9.0000e-005	9.0000e-005	0.0000		1.0000e-004
Total	**2.3000e-004**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**9.0000e-005**	**9.0000e-005**	**0.0000**		**1.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

VTA-SB Counties Intertie Project - Temporary Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation

South Central Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	2.00	1000sqft	0.59	2,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on information provided by the applicant. Area of disturbance is 25,800 sf and concrete building is 2,000 sf

Construction Phase - Adjusted construction schedule to meet applicant provided schedule.

Off-road Equipment - Default construction equipment was used.

Off-road Equipment - Based on project details, added Off-highway trucks to default construction equipment list

Off-road Equipment - Based on project details, added excavator to default construction equipment list.

Off-road Equipment - Default construction equipment was used.

Off-road Equipment - Default construction equipment was used

Trips and VMT - Information provided by the applicant

Grading -

Architectural Coating - Based on VCAPCD Rule 74.2 - Architectural Coatings

Vehicle Trips - 40 maintainence trips per year. Assumed all primary C-C trips.

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Based on VCAPCD Rule 74.2 Architectural Coating

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on VCAPCD Rule 55

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	100.00	306.00
tblConstructionPhase	NumDays	2.00	6.00
tblConstructionPhase	NumDays	1.00	3.00
tblLandUse	LotAcreage	0.05	0.59
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	1.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblVehicleTrips	CC_TTP	28.00	100.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.99	0.00
tblVehicleTrips	SU_TR	5.00	0.00
tblVehicleTrips	WD_TR	4.96	0.10

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0478	0.4152	0.4309	1.0300e-003	0.0219	0.0185	0.0404	9.1700e-003	0.0170	0.0262	0.0000	90.3776	90.3776	0.0280	1.1000e-004	91.1108
2024	0.1376	1.0983	1.2577	3.0200e-003	0.0151	0.0475	0.0626	4.0200e-003	0.0437	0.0477	0.0000	265.3453	265.3453	0.0822	2.9000e-004	267.4862
Maximum	**0.1376**	**1.0983**	**1.2577**	**3.0200e-003**	**0.0219**	**0.0475**	**0.0626**	**9.1700e-003**	**0.0437**	**0.0477**	**0.0000**	**265.3453**	**265.3453**	**0.0822**	**2.9000e-004**	**267.4862**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0136	0.0534	0.5607	1.0300e-003	0.0127	1.6300e-003	0.0143	4.8800e-003	1.6300e-003	6.5100e-003	0.0000	90.3775	90.3775	0.0280	1.1000e-004	91.1107
2024	0.0443	0.1562	1.6444	3.0200e-003	0.0151	4.7800e-003	0.0199	4.0200e-003	4.7700e-003	8.7900e-003	0.0000	265.3449	265.3449	0.0822	2.9000e-004	267.4859
Maximum	**0.0443**	**0.1562**	**1.6444**	**3.0200e-003**	**0.0151**	**4.7800e-003**	**0.0199**	**4.8800e-003**	**4.7700e-003**	**8.7900e-003**	**0.0000**	**265.3449**	**265.3449**	**0.0822**	**2.9000e-004**	**267.4859**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**68.77**	**86.16**	**-30.59**	**0.00**	**24.87**	**90.28**	**66.76**	**32.52**	**89.46**	**79.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-6-2023**	**12-5-2023**	0.3560	0.0513
2	**12-6-2023**	**3-5-2024**	0.3468	0.0544
3	**3-6-2024**	**6-5-2024**	0.3435	0.0548
4	**6-6-2024**	**9-5-2024**	0.3434	0.0547
5	**9-6-2024**	**9-30-2024**	0.0933	0.0149
		Highest	0.3560	0.0548

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.2800e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Energy	2.2000e-004	2.0400e-003	1.7100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	5.1490	5.1490	2.9000e-004	7.0000e-005	5.1773
Mobile	7.0000e-005	9.0000e-005	6.3000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1141	0.1141	1.0000e-005	1.0000e-005	0.1160
Waste						0.0000	0.0000		0.0000	0.0000	0.5034	0.0000	0.5034	0.0298	0.0000	1.2472
Water						0.0000	0.0000		0.0000	0.0000	0.1467	0.4438	0.5906	0.0151	3.6000e-004	1.0757
Total	**8.5700e-003**	**2.1300e-003**	**2.3600e-003**	**1.0000e-005**	**1.3000e-004**	**1.5000e-004**	**2.8000e-004**	**3.0000e-005**	**1.5000e-004**	**1.9000e-004**	**0.6502**	**5.7069**	**6.3571**	**0.0452**	**4.4000e-004**	**7.6162**

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.2800e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Energy	2.2000e-004	2.0400e-003	1.7100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	5.1490	5.1490	2.9000e-004	7.0000e-005	5.1773
Mobile	7.0000e-005	9.0000e-005	6.3000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1141	0.1141	1.0000e-005	1.0000e-005	0.1160
Waste						0.0000	0.0000		0.0000	0.0000	0.5034	0.0000	0.5034	0.0298	0.0000	1.2472
Water						0.0000	0.0000		0.0000	0.0000	0.1467	0.4438	0.5906	0.0151	3.6000e-004	1.0757
Total	**8.5700e-003**	**2.1300e-003**	**2.3600e-003**	**1.0000e-005**	**1.3000e-004**	**1.5000e-004**	**2.8000e-004**	**3.0000e-005**	**1.5000e-004**	**1.9000e-004**	**0.6502**	**5.7069**	**6.3571**	**0.0452**	**4.4000e-004**	**7.6162**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/6/2023	9/8/2023	5	3	
2	Grading	Grading	9/11/2023	9/18/2023	5	6	
3	Building Construction	Building Construction	9/19/2023	11/19/2024	5	306	

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4	Architectural Coating	Architectural Coating	11/19/2024	11/25/2024	5	5	
5	Paving	Paving	11/20/2024	11/26/2024	5	5	

Acres of Grading (Site Preparation Phase): 1.5

Acres of Grading (Grading Phase): 4.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 3,000; Non-Residential Outdoor: 1,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.0000e-004	0.0000	8.0000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-004	9.2800e-003	5.8900e-003	1.0000e-005		3.4000e-004	3.4000e-004		3.1000e-004	3.1000e-004	0.0000	1.2824	1.2824	4.1000e-004	0.0000	1.2928
Total	**8.0000e-004**	**9.2800e-003**	**5.8900e-003**	**1.0000e-005**	**8.0000e-004**	**3.4000e-004**	**1.1400e-003**	**9.0000e-005**	**3.1000e-004**	**4.0000e-004**	**0.0000**	**1.2824**	**1.2824**	**4.1000e-004**	**0.0000**	**1.2928**

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3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.2000e-004	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1439	0.1439	0.0000	0.0000	0.1452
Total	**6.0000e-005**	**4.0000e-005**	**5.2000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1439**	**0.1439**	**0.0000**	**0.0000**	**0.1452**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.6000e-004	0.0000	3.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8000e-004	7.7000e-004	7.9800e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.2824	1.2824	4.1000e-004	0.0000	1.2928
Total	**1.8000e-004**	**7.7000e-004**	**7.9800e-003**	**1.0000e-005**	**3.6000e-004**	**2.0000e-005**	**3.8000e-004**	**4.0000e-005**	**2.0000e-005**	**6.0000e-005**	**0.0000**	**1.2824**	**1.2824**	**4.1000e-004**	**0.0000**	**1.2928**

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3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.2000e-004	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1439	0.1439	0.0000	0.0000	0.1452
Total	**6.0000e-005**	**4.0000e-005**	**5.2000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1439**	**0.1439**	**0.0000**	**0.0000**	**0.1452**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0159	0.0000	0.0159	7.7100e-003	0.0000	7.7100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3700e-003	0.0352	0.0264	6.0000e-005		1.4900e-003	1.4900e-003		1.3700e-003	1.3700e-003	0.0000	5.0754	5.0754	1.6400e-003	0.0000	5.1164
Total	**3.3700e-003**	**0.0352**	**0.0264**	**6.0000e-005**	**0.0159**	**1.4900e-003**	**0.0174**	**7.7100e-003**	**1.3700e-003**	**9.0800e-003**	**0.0000**	**5.0754**	**5.0754**	**1.6400e-003**	**0.0000**	**5.1164**

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3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	9.0000e-005	1.0400e-003	0.0000	3.7000e-004	0.0000	3.8000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2879	0.2879	1.0000e-005	1.0000e-005	0.2904
Total	**1.1000e-004**	**9.0000e-005**	**1.0400e-003**	**0.0000**	**3.7000e-004**	**0.0000**	**3.8000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2879**	**0.2879**	**1.0000e-005**	**1.0000e-005**	**0.2904**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.1700e-003	0.0000	7.1700e-003	3.4700e-003	0.0000	3.4700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.1000e-004	3.0700e-003	0.0332	6.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	5.0754	5.0754	1.6400e-003	0.0000	5.1164
Total	**7.1000e-004**	**3.0700e-003**	**0.0332**	**6.0000e-005**	**7.1700e-003**	**9.0000e-005**	**7.2600e-003**	**3.4700e-003**	**9.0000e-005**	**3.5600e-003**	**0.0000**	**5.0754**	**5.0754**	**1.6400e-003**	**0.0000**	**5.1164**

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3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	9.0000e-005	1.0400e-003	0.0000	3.7000e-004	0.0000	3.8000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2879	0.2879	1.0000e-005	1.0000e-005	0.2904
Total	**1.1000e-004**	**9.0000e-005**	**1.0400e-003**	**0.0000**	**3.7000e-004**	**0.0000**	**3.8000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2879**	**0.2879**	**1.0000e-005**	**1.0000e-005**	**0.2904**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0420	0.3695	0.3843	9.1000e-004		0.0166	0.0166		0.0153	0.0153	0.0000	80.0377	80.0377	0.0259	0.0000	80.6848
Total	**0.0420**	**0.3695**	**0.3843**	**9.1000e-004**		**0.0166**	**0.0166**		**0.0153**	**0.0153**	**0.0000**	**80.0377**	**80.0377**	**0.0259**	**0.0000**	**80.6848**

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3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4100e-003	1.0800e-003	0.0128	4.0000e-005	4.6200e-003	2.0000e-005	4.6500e-003	1.2300e-003	2.0000e-005	1.2500e-003	0.0000	3.5504	3.5504	9.0000e-005	1.0000e-004	3.5812
Total	**1.4100e-003**	**1.0800e-003**	**0.0128**	**4.0000e-005**	**4.6200e-003**	**2.0000e-005**	**4.6500e-003**	**1.2300e-003**	**2.0000e-005**	**1.2500e-003**	**0.0000**	**3.5504**	**3.5504**	**9.0000e-005**	**1.0000e-004**	**3.5812**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0112	0.0483	0.5052	9.1000e-004		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003	0.0000	80.0376	80.0376	0.0259	0.0000	80.6847
Total	**0.0112**	**0.0483**	**0.5052**	**9.1000e-004**		**1.4900e-003**	**1.4900e-003**		**1.4900e-003**	**1.4900e-003**	**0.0000**	**80.0376**	**80.0376**	**0.0259**	**0.0000**	**80.6847**

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3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4100e-003	1.0800e-003	0.0128	4.0000e-005	4.6200e-003	2.0000e-005	4.6500e-003	1.2300e-003	2.0000e-005	1.2500e-003	0.0000	3.5504	3.5504	9.0000e-005	1.0000e-004	3.5812
Total	**1.4100e-003**	**1.0800e-003**	**0.0128**	**4.0000e-005**	**4.6200e-003**	**2.0000e-005**	**4.6500e-003**	**1.2300e-003**	**2.0000e-005**	**1.2500e-003**	**0.0000**	**3.5504**	**3.5504**	**9.0000e-005**	**1.0000e-004**	**3.5812**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1267	1.0790	1.1969	2.8600e-003		0.0467	0.0467		0.0429	0.0429	0.0000	251.0169	251.0169	0.0812	0.0000	253.0465
Total	**0.1267**	**1.0790**	**1.1969**	**2.8600e-003**		**0.0467**	**0.0467**		**0.0429**	**0.0429**	**0.0000**	**251.0169**	**251.0169**	**0.0812**	**0.0000**	**253.0465**

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3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1500e-003	3.0200e-003	0.0372	1.2000e-004	0.0145	7.0000e-005	0.0146	3.8500e-003	6.0000e-005	3.9100e-003	0.0000	10.8713	10.8713	2.5000e-004	2.8000e-004	10.9608
Total	**4.1500e-003**	**3.0200e-003**	**0.0372**	**1.2000e-004**	**0.0145**	**7.0000e-005**	**0.0146**	**3.8500e-003**	**6.0000e-005**	**3.9100e-003**	**0.0000**	**10.8713**	**10.8713**	**2.5000e-004**	**2.8000e-004**	**10.9608**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0350	0.1515	1.5838	2.8600e-003		4.6600e-003	4.6600e-003		4.6600e-003	4.6600e-003	0.0000	251.0166	251.0166	0.0812	0.0000	253.0462
Total	**0.0350**	**0.1515**	**1.5838**	**2.8600e-003**		**4.6600e-003**	**4.6600e-003**		**4.6600e-003**	**4.6600e-003**	**0.0000**	**251.0166**	**251.0166**	**0.0812**	**0.0000**	**253.0462**

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3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1500e-003	3.0200e-003	0.0372	1.2000e-004	0.0145	7.0000e-005	0.0146	3.8500e-003	6.0000e-005	3.9100e-003	0.0000	10.8713	10.8713	2.5000e-004	2.8000e-004	10.9608
Total	**4.1500e-003**	**3.0200e-003**	**0.0372**	**1.2000e-004**	**0.0145**	**7.0000e-005**	**0.0146**	**3.8500e-003**	**6.0000e-005**	**3.9100e-003**	**0.0000**	**10.8713**	**10.8713**	**2.5000e-004**	**2.8000e-004**	**10.9608**

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.6300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-004	3.0500e-003	4.5300e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6392
Total	**5.0800e-003**	**3.0500e-003**	**4.5300e-003**	**1.0000e-005**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6392**

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3.5 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	7.0000e-005	8.0000e-004	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2343	0.2343	1.0000e-005	1.0000e-005	0.2362
Total	**9.0000e-005**	**7.0000e-005**	**8.0000e-004**	**0.0000**	**3.1000e-004**	**0.0000**	**3.1000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2343**	**0.2343**	**1.0000e-005**	**1.0000e-005**	**0.2362**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.6300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.0000e-005	3.2000e-004	4.5800e-003	1.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6392
Total	**4.7000e-003**	**3.2000e-004**	**4.5800e-003**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6392**

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3.5 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	7.0000e-005	8.0000e-004	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2343	0.2343	1.0000e-005	1.0000e-005	0.2362
Total	**9.0000e-005**	**7.0000e-005**	**8.0000e-004**	**0.0000**	**3.1000e-004**	**0.0000**	**3.1000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2343**	**0.2343**	**1.0000e-005**	**1.0000e-005**	**0.2362**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4800e-003	0.0131	0.0176	3.0000e-005		6.1000e-004	6.1000e-004		5.7000e-004	5.7000e-004	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.4800e-003**	**0.0131**	**0.0176**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**5.7000e-004**	**5.7000e-004**	**0.0000**	**2.3502**	**2.3502**	**6.8000e-004**	**0.0000**	**2.3673**

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3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	7.0000e-005	8.0000e-004	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2343	0.2343	1.0000e-005	1.0000e-005	0.2362
Total	**9.0000e-005**	**7.0000e-005**	**8.0000e-004**	**0.0000**	**3.1000e-004**	**0.0000**	**3.1000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2343**	**0.2343**	**1.0000e-005**	**1.0000e-005**	**0.2362**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.8000e-004	1.2100e-003	0.0173	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.8000e-004**	**1.2100e-003**	**0.0173**	**3.0000e-005**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**2.3502**	**2.3502**	**6.8000e-004**	**0.0000**	**2.3673**

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3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	7.0000e-005	8.0000e-004	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2343	0.2343	1.0000e-005	1.0000e-005	0.2362
Total	**9.0000e-005**	**7.0000e-005**	**8.0000e-004**	**0.0000**	**3.1000e-004**	**0.0000**	**3.1000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2343**	**0.2343**	**1.0000e-005**	**1.0000e-005**	**0.2362**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	7.0000e-005	9.0000e-005	6.3000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1141	0.1141	1.0000e-005	1.0000e-005	0.1160
Unmitigated	7.0000e-005	9.0000e-005	6.3000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1141	0.1141	1.0000e-005	1.0000e-005	0.1160

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.20	0.00	0.00	343	343
Total	0.20	0.00	0.00	343	343

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.518500	0.056626	0.189643	0.140762	0.030399	0.007841	0.010730	0.006132	0.000824	0.000442	0.030440	0.001544	0.006118

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2.9333	2.9333	2.5000e-004	3.0000e-005	2.9484
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2.9333	2.9333	2.5000e-004	3.0000e-005	2.9484
NaturalGas Mitigated	2.2000e-004	2.0400e-003	1.7100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	2.2157	2.2157	4.0000e-005	4.0000e-005	2.2288
NaturalGas Unmitigated	2.2000e-004	2.0400e-003	1.7100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	2.2157	2.2157	4.0000e-005	4.0000e-005	2.2288

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	41520	2.2000e-004	2.0400e-003	1.7100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	2.2157	2.2157	4.0000e-005	4.0000e-005	2.2288
Total		**2.2000e-004**	**2.0400e-003**	**1.7100e-003**	**1.0000e-005**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**2.2157**	**2.2157**	**4.0000e-005**	**4.0000e-005**	**2.2288**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	41520	2.2000e-004	2.0400e-003	1.7100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	2.2157	2.2157	4.0000e-005	4.0000e-005	2.2288
Total		**2.2000e-004**	**2.0400e-003**	**1.7100e-003**	**1.0000e-005**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**2.2157**	**2.2157**	**4.0000e-005**	**4.0000e-005**	**2.2288**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	16540	2.9333	2.5000e-004	3.0000e-005	2.9484
Total		**2.9333**	**2.5000e-004**	**3.0000e-005**	**2.9484**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	16540	2.9333	2.5000e-004	3.0000e-005	2.9484
Total		**2.9333**	**2.5000e-004**	**3.0000e-005**	**2.9484**

6.0 Area Detail

6.1 Mitigation Measures Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	8.2800e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Unmitigated	8.2800e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Total	**8.2700e-003**	**0.0000**	**2.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Total	**8.2700e-003**	**0.0000**	**2.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.5906	0.0151	3.6000e-004	1.0757
Unmitigated	0.5906	0.0151	3.6000e-004	1.0757

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.4625 / 0	0.5906	0.0151	3.6000e-004	1.0757
Total		**0.5906**	**0.0151**	**3.6000e-004**	**1.0757**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.4625 / 0	0.5906	0.0151	3.6000e-004	1.0757
Total		**0.5906**	**0.0151**	**3.6000e-004**	**1.0757**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.5034	0.0298	0.0000	1.2472
Unmitigated	0.5034	0.0298	0.0000	1.2472

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	2.48	0.5034	0.0298	0.0000	1.2472
Total		**0.5034**	**0.0298**	**0.0000**	**1.2472**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	2.48	0.5034	0.0298	0.0000	1.2472
Total		**0.5034**	**0.0298**	**0.0000**	**1.2472**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation

South Central Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	2.00	1000sqft	0.59	2,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on information provided by the applicant. Area of disturbance is 25,800 sf and concrete building is 2,000 sf

Construction Phase - Adjusted construction schedule to meet applicant provided schedule.

Off-road Equipment - Default construction equipment was used.

Off-road Equipment - Based on project details, added Off-highway trucks to default construction equipment list

Off-road Equipment - Based on project details, added excavator to default construction equipment list.

Off-road Equipment - Default construction equipment was used.

Off-road Equipment - Default construction equipment was used

Trips and VMT - Information provided by the applicant

Grading -

Architectural Coating - Based on VCAPCD Rule 74.2 - Architectural Coatings

Vehicle Trips - 40 maintainence trips per year. Assumed all primary C-C trips.

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Based on VCAPCD Rule 74.2 Architectural Coating

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on VCAPCD Rule 55

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	100.00	306.00
tblConstructionPhase	NumDays	2.00	6.00
tblConstructionPhase	NumDays	1.00	3.00
tblLandUse	LotAcreage	0.05	0.59
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	1.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblVehicleTrips	CC_TTP	28.00	100.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.99	0.00
tblVehicleTrips	SU_TR	5.00	0.00
tblVehicleTrips	WD_TR	4.96	0.10

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.1735	11.7536	10.7434	0.0257	5.4397	0.4965	5.9362	2.6024	0.4568	3.0592	0.0000	2,493.7654	2,493.7654	0.7737	2.6500e-003	2,513.8986
2024	3.1969	10.5671	12.7918	0.0297	0.2555	0.4643	0.7198	0.0677	0.4320	0.4998	0.0000	2,880.2047	2,880.2047	0.7919	4.9200e-003	2,901.4676
Maximum	**3.1969**	**11.7536**	**12.7918**	**0.0297**	**5.4397**	**0.4965**	**5.9362**	**2.6024**	**0.4568**	**3.0592**	**0.0000**	**2,880.2047**	**2,880.2047**	**0.7919**	**4.9200e-003**	**2,901.4676**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.3387	1.3318	14.0113	0.0257	2.5181	0.0408	2.5502	1.1897	0.0408	1.2218	0.0000	2,493.7654	2,493.7654	0.7737	2.6500e-003	2,513.8986
2024	2.2551	1.4809	16.1498	0.0297	0.2555	0.0453	0.3008	0.0677	0.0452	0.1130	0.0000	2,880.2047	2,880.2047	0.7919	4.9200e-003	2,901.4676
Maximum	**2.2551**	**1.4809**	**16.1498**	**0.0297**	**2.5181**	**0.0453**	**2.5502**	**1.1897**	**0.0452**	**1.2218**	**0.0000**	**2,880.2047**	**2,880.2047**	**0.7919**	**4.9200e-003**	**2,901.4676**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	40.65	87.40	-28.15	0.00	51.30	91.04	57.17	52.91	90.33	62.50	0.00	0.00	0.00	0.00	0.00	0.00

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0454	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Energy	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623
Mobile	5.7000e-004	6.4000e-004	4.7100e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004		0.9920	0.9920	7.0000e-005	5.0000e-005	1.0078
Total	**0.0472**	**0.0118**	**0.0143**	**8.0000e-005**	**1.0100e-003**	**8.6000e-004**	**1.8700e-003**	**2.7000e-004**	**8.6000e-004**	**1.1300e-003**		**14.3752**	**14.3752**	**3.3000e-004**	**3.0000e-004**	**14.4705**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0454	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Energy	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623
Mobile	5.7000e-004	6.4000e-004	4.7100e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004		0.9920	0.9920	7.0000e-005	5.0000e-005	1.0078
Total	**0.0472**	**0.0118**	**0.0143**	**8.0000e-005**	**1.0100e-003**	**8.6000e-004**	**1.8700e-003**	**2.7000e-004**	**8.6000e-004**	**1.1300e-003**		**14.3752**	**14.3752**	**3.3000e-004**	**3.0000e-004**	**14.4705**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/6/2023	9/8/2023	5	3	
2	Grading	Grading	9/11/2023	9/18/2023	5	6	
3	Building Construction	Building Construction	9/19/2023	11/19/2024	5	306	
4	Architectural Coating	Architectural Coating	11/19/2024	11/25/2024	5	5	
5	Paving	Paving	11/20/2024	11/26/2024	5	5	

Acres of Grading (Site Preparation Phase): 1.5

Acres of Grading (Grading Phase): 4.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 3,000; Non-Residential Outdoor: 1,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**		**942.4317**	**942.4317**	**0.3048**		**950.0517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0374	0.0261	0.3578	1.0700e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		109.2681	109.2681	2.5500e-003	2.6500e-003	110.1213
Total	**0.0374**	**0.0261**	**0.3578**	**1.0700e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**109.2681**	**109.2681**	**2.5500e-003**	**2.6500e-003**	**110.1213**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	0.1191	0.5162	5.3170	9.7300e-003		0.0159	0.0159		0.0159	0.0159	0.0000	942.4317	942.4317	0.3048		950.0517
Total	**0.1191**	**0.5162**	**5.3170**	**9.7300e-003**	**0.2386**	**0.0159**	**0.2545**	**0.0258**	**0.0159**	**0.0416**	**0.0000**	**942.4317**	**942.4317**	**0.3048**		**950.0517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0374	0.0261	0.3578	1.0700e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		109.2681	109.2681	2.5500e-003	2.6500e-003	110.1213
Total	**0.0374**	**0.0261**	**0.3578**	**1.0700e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**109.2681**	**109.2681**	**2.5500e-003**	**2.6500e-003**	**110.1213**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	1.1222	11.7275	8.8094	0.0193		0.4959	0.4959		0.4562	0.4562		1,864.8770	1,864.8770	0.6031		1,879.9554
Total	**1.1222**	**11.7275**	**8.8094**	**0.0193**	**5.3119**	**0.4959**	**5.8078**	**2.5686**	**0.4562**	**3.0248**		**1,864.8770**	**1,864.8770**	**0.6031**		**1,879.9554**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0374	0.0261	0.3578	1.0700e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		109.2681	109.2681	2.5500e-003	2.6500e-003	110.1213
Total	**0.0374**	**0.0261**	**0.3578**	**1.0700e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**109.2681**	**109.2681**	**2.5500e-003**	**2.6500e-003**	**110.1213**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3904	0.0000	2.3904	1.1559	0.0000	1.1559			0.0000			0.0000
Off-Road	0.2360	1.0228	11.0737	0.0193		0.0315	0.0315		0.0315	0.0315	0.0000	1,864.8770	1,864.8770	0.6031		1,879.9554
Total	**0.2360**	**1.0228**	**11.0737**	**0.0193**	**2.3904**	**0.0315**	**2.4218**	**1.1559**	**0.0315**	**1.1873**	**0.0000**	**1,864.8770**	**1,864.8770**	**0.6031**		**1,879.9554**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0374	0.0261	0.3578	1.0700e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		109.2681	109.2681	2.5500e-003	2.6500e-003	110.1213
Total	**0.0374**	**0.0261**	**0.3578**	**1.0700e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**109.2681**	**109.2681**	**2.5500e-003**	**2.6500e-003**	**110.1213**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1361	9.9865	10.3855	0.0246		0.4493	0.4493		0.4133	0.4133		2,384.4974	2,384.4974	0.7712		2,403.7772
Total	**1.1361**	**9.9865**	**10.3855**	**0.0246**		**0.4493**	**0.4493**		**0.4133**	**0.4133**		**2,384.4974**	**2,384.4974**	**0.7712**		**2,403.7772**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0374	0.0261	0.3578	1.0700e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		109.2681	109.2681	2.5500e-003	2.6500e-003	110.1213
Total	**0.0374**	**0.0261**	**0.3578**	**1.0700e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**109.2681**	**109.2681**	**2.5500e-003**	**2.6500e-003**	**110.1213**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3013	1.3057	13.6534	0.0246		0.0402	0.0402		0.0402	0.0402	0.0000	2,384.4974	2,384.4974	0.7712		2,403.7772
Total	**0.3013**	**1.3057**	**13.6534**	**0.0246**		**0.0402**	**0.0402**		**0.0402**	**0.0402**	**0.0000**	**2,384.4974**	**2,384.4974**	**0.7712**		**2,403.7772**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0374	0.0261	0.3578	1.0700e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		109.2681	109.2681	2.5500e-003	2.6500e-003	110.1213
Total	**0.0374**	**0.0261**	**0.3578**	**1.0700e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**109.2681**	**109.2681**	**2.5500e-003**	**2.6500e-003**	**110.1213**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0921	9.3018	10.3177	0.0246		0.4022	0.4022		0.3700	0.3700		2,385.3338	2,385.3338	0.7715		2,404.6205
Total	**1.0921**	**9.3018**	**10.3177**	**0.0246**		**0.4022**	**0.4022**		**0.3700**	**0.3700**		**2,385.3338**	**2,385.3338**	**0.7715**		**2,404.6205**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0350	0.0232	0.3320	1.0300e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		106.7114	106.7114	2.3100e-003	2.4600e-003	107.5014
Total	**0.0350**	**0.0232**	**0.3320**	**1.0300e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**106.7114**	**106.7114**	**2.3100e-003**	**2.4600e-003**	**107.5014**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3013	1.3057	13.6534	0.0246		0.0402	0.0402		0.0402	0.0402	0.0000	2,385.3338	2,385.3338	0.7715		2,404.6205
Total	**0.3013**	**1.3057**	**13.6534**	**0.0246**		**0.0402**	**0.0402**		**0.0402**	**0.0402**	**0.0000**	**2,385.3338**	**2,385.3338**	**0.7715**		**2,404.6205**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0350	0.0232	0.3320	1.0300e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		106.7114	106.7114	2.3100e-003	2.4600e-003	107.5014
Total	**0.0350**	**0.0232**	**0.3320**	**1.0300e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**106.7114**	**106.7114**	**2.3100e-003**	**2.4600e-003**	**107.5014**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.8540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**2.0348**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0350	0.0232	0.3320	1.0300e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		106.7114	106.7114	2.3100e-003	2.4600e-003	107.5014
Total	**0.0350**	**0.0232**	**0.3320**	**1.0300e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**106.7114**	**106.7114**	**2.3100e-003**	**2.4600e-003**	**107.5014**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.8540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**1.8837**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0350	0.0232	0.3320	1.0300e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		106.7114	106.7114	2.3100e-003	2.4600e-003	107.5014
Total	**0.0350**	**0.0232**	**0.3320**	**1.0300e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**106.7114**	**106.7114**	**2.3100e-003**	**2.4600e-003**	**107.5014**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269		1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5904**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**		**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0350	0.0232	0.3320	1.0300e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		106.7114	106.7114	2.3100e-003	2.4600e-003	107.5014
Total	**0.0350**	**0.0232**	**0.3320**	**1.0300e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**106.7114**	**106.7114**	**2.3100e-003**	**2.4600e-003**	**107.5014**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1119	0.4851	6.9028	0.0113		0.0149	0.0149		0.0149	0.0149	0.0000	1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.1119**	**0.4851**	**6.9028**	**0.0113**		**0.0149**	**0.0149**		**0.0149**	**0.0149**	**0.0000**	**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0350	0.0232	0.3320	1.0300e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		106.7114	106.7114	2.3100e-003	2.4600e-003	107.5014
Total	**0.0350**	**0.0232**	**0.3320**	**1.0300e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**106.7114**	**106.7114**	**2.3100e-003**	**2.4600e-003**	**107.5014**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.7000e-004	6.4000e-004	4.7100e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004		0.9920	0.9920	7.0000e-005	5.0000e-005	1.0078
Unmitigated	5.7000e-004	6.4000e-004	4.7100e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004		0.9920	0.9920	7.0000e-005	5.0000e-005	1.0078

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.20	0.00	0.00	343	343
Total	0.20	0.00	0.00	343	343

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.518500	0.056626	0.189643	0.140762	0.030399	0.007841	0.010730	0.006132	0.000824	0.000442	0.030440	0.001544	0.006118

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623
NaturalGas Unmitigated	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	113.753	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623
Total		**1.2300e-003**	**0.0112**	**9.3700e-003**	**7.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**		**13.3828**	**13.3828**	**2.6000e-004**	**2.5000e-004**	**13.4623**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0.113753	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623
Total		**1.2300e-003**	**0.0112**	**9.3700e-003**	**7.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**		**13.3828**	**13.3828**	**2.6000e-004**	**2.5000e-004**	**13.4623**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0454	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Unmitigated	0.0454	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.5400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0428					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Total	**0.0454**	**0.0000**	**2.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**4.4000e-004**	**4.4000e-004**	**0.0000**		**4.7000e-004**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.5400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0428					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Total	**0.0454**	**0.0000**	**2.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**4.4000e-004**	**4.4000e-004**	**0.0000**		**4.7000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation

South Central Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	2.00	1000sqft	0.59	2,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on information provided by the applicant. Area of disturbance is 25,800 sf and concrete building is 2,000 sf

Construction Phase - Adjusted construction schedule to meet applicant provided schedule.

Off-road Equipment - Default construction equipment was used.

Off-road Equipment - Based on project details, added Off-highway trucks to default construction equipment list

Off-road Equipment - Based on project details, added excavator to default construction equipment list.

Off-road Equipment - Default construction equipment was used.

Off-road Equipment - Default construction equipment was used

Trips and VMT - Information provided by the applicant

Grading -

Architectural Coating - Based on VCAPCD Rule 74.2 - Architectural Coatings

Vehicle Trips - 40 maintainence trips per year. Assumed all primary C-C trips.

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Based on VCAPCD Rule 74.2 Architectural Coating

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on VCAPCD Rule 55

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	100.00	306.00
tblConstructionPhase	NumDays	2.00	6.00
tblConstructionPhase	NumDays	1.00	3.00
tblLandUse	LotAcreage	0.05	0.59
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	1.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblVehicleTrips	CC_TTP	28.00	100.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.99	0.00
tblVehicleTrips	SU_TR	5.00	0.00
tblVehicleTrips	WD_TR	4.96	0.10

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.1781	11.7576	10.7330	0.0257	5.4397	0.4965	5.9362	2.6024	0.4568	3.0592	0.0000	2,489.6790	2,489.6790	0.7739	2.9200e-003	2,509.8954
2024	3.2058	10.5742	12.7735	0.0296	0.2555	0.4643	0.7198	0.0677	0.4320	0.4998	0.0000	2,872.2426	2,872.2426	0.7922	5.4000e-003	2,893.6595
Maximum	**3.2058**	**11.7576**	**12.7735**	**0.0296**	**5.4397**	**0.4965**	**5.9362**	**2.6024**	**0.4568**	**3.0592**	**0.0000**	**2,872.2426**	**2,872.2426**	**0.7922**	**5.4000e-003**	**2,893.6595**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.3433	1.3358	14.0009	0.0257	2.5181	0.0408	2.5502	1.1897	0.0408	1.2218	0.0000	2,489.6790	2,489.6790	0.7739	2.9200e-003	2,509.8954
2024	2.2640	1.4881	16.1315	0.0296	0.2555	0.0453	0.3008	0.0677	0.0452	0.1130	0.0000	2,872.2426	2,872.2426	0.7922	5.4000e-003	2,893.6595
Maximum	**2.2640**	**1.4881**	**16.1315**	**0.0296**	**2.5181**	**0.0453**	**2.5502**	**1.1897**	**0.0452**	**1.2218**	**0.0000**	**2,872.2426**	**2,872.2426**	**0.7922**	**5.4000e-003**	**2,893.6595**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	40.53	87.35	-28.19	0.00	51.30	91.04	57.17	52.91	90.33	62.50	0.00	0.00	0.00	0.00	0.00	0.00

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0454	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Energy	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623
Mobile	5.6000e-004	7.0000e-004	5.0500e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004		0.9648	0.9648	7.0000e-005	5.0000e-005	0.9816
Total	**0.0472**	**0.0119**	**0.0146**	**8.0000e-005**	**1.0100e-003**	**8.6000e-004**	**1.8700e-003**	**2.7000e-004**	**8.6000e-004**	**1.1300e-003**		**14.3480**	**14.3480**	**3.3000e-004**	**3.0000e-004**	**14.4443**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0454	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Energy	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623
Mobile	5.6000e-004	7.0000e-004	5.0500e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004		0.9648	0.9648	7.0000e-005	5.0000e-005	0.9816
Total	**0.0472**	**0.0119**	**0.0146**	**8.0000e-005**	**1.0100e-003**	**8.6000e-004**	**1.8700e-003**	**2.7000e-004**	**8.6000e-004**	**1.1300e-003**		**14.3480**	**14.3480**	**3.3000e-004**	**3.0000e-004**	**14.4443**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/6/2023	9/8/2023	5	3	
2	Grading	Grading	9/11/2023	9/18/2023	5	6	
3	Building Construction	Building Construction	9/19/2023	11/19/2024	5	306	
4	Architectural Coating	Architectural Coating	11/19/2024	11/25/2024	5	5	
5	Paving	Paving	11/20/2024	11/26/2024	5	5	

Acres of Grading (Site Preparation Phase): 1.5

Acres of Grading (Grading Phase): 4.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 3,000; Non-Residential Outdoor: 1,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**		**942.4317**	**942.4317**	**0.3048**		**950.0517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0420	0.0301	0.3475	1.0300e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		105.1816	105.1816	2.7000e-003	2.9200e-003	106.1181
Total	**0.0420**	**0.0301**	**0.3475**	**1.0300e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**105.1816**	**105.1816**	**2.7000e-003**	**2.9200e-003**	**106.1181**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	0.1191	0.5162	5.3170	9.7300e-003		0.0159	0.0159		0.0159	0.0159	0.0000	942.4317	942.4317	0.3048		950.0517
Total	**0.1191**	**0.5162**	**5.3170**	**9.7300e-003**	**0.2386**	**0.0159**	**0.2545**	**0.0258**	**0.0159**	**0.0416**	**0.0000**	**942.4317**	**942.4317**	**0.3048**		**950.0517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0420	0.0301	0.3475	1.0300e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		105.1816	105.1816	2.7000e-003	2.9200e-003	106.1181
Total	**0.0420**	**0.0301**	**0.3475**	**1.0300e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**105.1816**	**105.1816**	**2.7000e-003**	**2.9200e-003**	**106.1181**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	1.1222	11.7275	8.8094	0.0193		0.4959	0.4959		0.4562	0.4562		1,864.8770	1,864.8770	0.6031		1,879.9554
Total	**1.1222**	**11.7275**	**8.8094**	**0.0193**	**5.3119**	**0.4959**	**5.8078**	**2.5686**	**0.4562**	**3.0248**		**1,864.8770**	**1,864.8770**	**0.6031**		**1,879.9554**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0420	0.0301	0.3475	1.0300e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		105.1816	105.1816	2.7000e-003	2.9200e-003	106.1181
Total	**0.0420**	**0.0301**	**0.3475**	**1.0300e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**105.1816**	**105.1816**	**2.7000e-003**	**2.9200e-003**	**106.1181**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3904	0.0000	2.3904	1.1559	0.0000	1.1559			0.0000			0.0000
Off-Road	0.2360	1.0228	11.0737	0.0193		0.0315	0.0315		0.0315	0.0315	0.0000	1,864.8770	1,864.8770	0.6031		1,879.9554
Total	**0.2360**	**1.0228**	**11.0737**	**0.0193**	**2.3904**	**0.0315**	**2.4218**	**1.1559**	**0.0315**	**1.1873**	**0.0000**	**1,864.8770**	**1,864.8770**	**0.6031**		**1,879.9554**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0420	0.0301	0.3475	1.0300e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		105.1816	105.1816	2.7000e-003	2.9200e-003	106.1181
Total	**0.0420**	**0.0301**	**0.3475**	**1.0300e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**105.1816**	**105.1816**	**2.7000e-003**	**2.9200e-003**	**106.1181**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1361	9.9865	10.3855	0.0246		0.4493	0.4493		0.4133	0.4133		2,384.4974	2,384.4974	0.7712		2,403.7772
Total	**1.1361**	**9.9865**	**10.3855**	**0.0246**		**0.4493**	**0.4493**		**0.4133**	**0.4133**		**2,384.4974**	**2,384.4974**	**0.7712**		**2,403.7772**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0420	0.0301	0.3475	1.0300e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		105.1816	105.1816	2.7000e-003	2.9200e-003	106.1181
Total	**0.0420**	**0.0301**	**0.3475**	**1.0300e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**105.1816**	**105.1816**	**2.7000e-003**	**2.9200e-003**	**106.1181**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3013	1.3057	13.6534	0.0246		0.0402	0.0402		0.0402	0.0402	0.0000	2,384.4974	2,384.4974	0.7712		2,403.7772
Total	**0.3013**	**1.3057**	**13.6534**	**0.0246**		**0.0402**	**0.0402**		**0.0402**	**0.0402**	**0.0000**	**2,384.4974**	**2,384.4974**	**0.7712**		**2,403.7772**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0420	0.0301	0.3475	1.0300e-003	0.1277	6.3000e-004	0.1284	0.0339	5.8000e-004	0.0345		105.1816	105.1816	2.7000e-003	2.9200e-003	106.1181
Total	**0.0420**	**0.0301**	**0.3475**	**1.0300e-003**	**0.1277**	**6.3000e-004**	**0.1284**	**0.0339**	**5.8000e-004**	**0.0345**		**105.1816**	**105.1816**	**2.7000e-003**	**2.9200e-003**	**106.1181**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0921	9.3018	10.3177	0.0246		0.4022	0.4022		0.3700	0.3700		2,385.3338	2,385.3338	0.7715		2,404.6205
Total	**1.0921**	**9.3018**	**10.3177**	**0.0246**		**0.4022**	**0.4022**		**0.3700**	**0.3700**		**2,385.3338**	**2,385.3338**	**0.7715**		**2,404.6205**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0395	0.0268	0.3228	1.0000e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		102.7304	102.7304	2.4500e-003	2.7000e-003	103.5974
Total	**0.0395**	**0.0268**	**0.3228**	**1.0000e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**102.7304**	**102.7304**	**2.4500e-003**	**2.7000e-003**	**103.5974**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3013	1.3057	13.6534	0.0246		0.0402	0.0402		0.0402	0.0402	0.0000	2,385.3338	2,385.3338	0.7715		2,404.6205
Total	**0.3013**	**1.3057**	**13.6534**	**0.0246**		**0.0402**	**0.0402**		**0.0402**	**0.0402**	**0.0000**	**2,385.3338**	**2,385.3338**	**0.7715**		**2,404.6205**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0395	0.0268	0.3228	1.0000e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		102.7304	102.7304	2.4500e-003	2.7000e-003	103.5974
Total	**0.0395**	**0.0268**	**0.3228**	**1.0000e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**102.7304**	**102.7304**	**2.4500e-003**	**2.7000e-003**	**103.5974**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.8540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**2.0348**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0395	0.0268	0.3228	1.0000e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		102.7304	102.7304	2.4500e-003	2.7000e-003	103.5974
Total	**0.0395**	**0.0268**	**0.3228**	**1.0000e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**102.7304**	**102.7304**	**2.4500e-003**	**2.7000e-003**	**103.5974**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.8540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**1.8837**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0395	0.0268	0.3228	1.0000e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		102.7304	102.7304	2.4500e-003	2.7000e-003	103.5974
Total	**0.0395**	**0.0268**	**0.3228**	**1.0000e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**102.7304**	**102.7304**	**2.4500e-003**	**2.7000e-003**	**103.5974**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269		1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5904**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**		**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0395	0.0268	0.3228	1.0000e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		102.7304	102.7304	2.4500e-003	2.7000e-003	103.5974
Total	**0.0395**	**0.0268**	**0.3228**	**1.0000e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**102.7304**	**102.7304**	**2.4500e-003**	**2.7000e-003**	**103.5974**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1119	0.4851	6.9028	0.0113		0.0149	0.0149		0.0149	0.0149	0.0000	1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.1119**	**0.4851**	**6.9028**	**0.0113**		**0.0149**	**0.0149**		**0.0149**	**0.0149**	**0.0000**	**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0395	0.0268	0.3228	1.0000e-003	0.1277	6.0000e-004	0.1283	0.0339	5.5000e-004	0.0344		102.7304	102.7304	2.4500e-003	2.7000e-003	103.5974
Total	**0.0395**	**0.0268**	**0.3228**	**1.0000e-003**	**0.1277**	**6.0000e-004**	**0.1283**	**0.0339**	**5.5000e-004**	**0.0344**		**102.7304**	**102.7304**	**2.4500e-003**	**2.7000e-003**	**103.5974**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.6000e-004	7.0000e-004	5.0500e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004		0.9648	0.9648	7.0000e-005	5.0000e-005	0.9816
Unmitigated	5.6000e-004	7.0000e-004	5.0500e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004		0.9648	0.9648	7.0000e-005	5.0000e-005	0.9816

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.20	0.00	0.00	343	343
Total	0.20	0.00	0.00	343	343

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.518500	0.056626	0.189643	0.140762	0.030399	0.007841	0.010730	0.006132	0.000824	0.000442	0.030440	0.001544	0.006118

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623
NaturalGas Unmitigated	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	113.753	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623
Total		**1.2300e-003**	**0.0112**	**9.3700e-003**	**7.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**		**13.3828**	**13.3828**	**2.6000e-004**	**2.5000e-004**	**13.4623**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0.113753	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3828	13.3828	2.6000e-004	2.5000e-004	13.4623
Total		**1.2300e-003**	**0.0112**	**9.3700e-003**	**7.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**		**13.3828**	**13.3828**	**2.6000e-004**	**2.5000e-004**	**13.4623**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0454	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Unmitigated	0.0454	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.5400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0428					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Total	**0.0454**	**0.0000**	**2.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**4.4000e-004**	**4.4000e-004**	**0.0000**		**4.7000e-004**

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.5400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0428					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Total	**0.0454**	**0.0000**	**2.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**4.4000e-004**	**4.4000e-004**	**0.0000**		**4.7000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

VTA-SB Counties Intertie Project - Booster Pump Station A - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation

South Central Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	4.71	1000sqft	0.29	4,710.00	0
Other Non-Asphalt Surfaces	0.65	1000sqft	0.01	650.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Infrastructure improvements are assumed 10 percent of pipeline area. Total square feet = (900 sf booster pump station x 38,100 pipeline(.10)) = 4,710 sf. And 130 LF pipeline replaced at Rincon Pump Plant. 8,900 sf of distrubance area for BPS-B

Construction Phase - Construction Schedule adjusted to match applicant provided schedule.

Off-road Equipment - Used default construction equipment list.

Off-road Equipment - Based on project details, added off-highway trucks to default construction equipment list.

Off-road Equipment - Based on project details, added excavators to other default equipment list.

Off-road Equipment - Used default construction equipment list

Off-road Equipment - Used Default construction equipment

Trips and VMT - Trips based on information provided by the applicant.

Grading -

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating - Based on VCAPCD Rule 74.2 Architectural Coating

Vehicle Trips - 50 maintenance trips per year. Assume all primary C-C trips

Area Coating - Based on VCAPCD Rule 74.2 Architectural Coating

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on VCAPCD Rule 55

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	1.00	3.00
tblConstructionPhase	NumDays	2.00	7.00
tblConstructionPhase	NumDays	100.00	335.00
tblLandUse	LotAcreage	0.11	0.29
tblTripsAndVMT	VendorTripNumber	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	2.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblVehicleTrips	CC_TTP	28.00	100.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.99	0.00
tblVehicleTrips	SU_TR	5.00	0.00
tblVehicleTrips	WD_TR	4.96	0.05

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0136	0.1255	0.1176	2.8000e-004	0.0204	5.4500e-003	0.0258	9.3400e-003	5.0100e-003	0.0144	0.0000	24.2065	24.2065	7.6000e-003	2.0000e-005	24.4036
2024	0.1466	1.2210	1.3811	3.3100e-003	0.0105	0.0527	0.0633	2.8000e-003	0.0485	0.0513	0.0000	291.4494	291.4494	0.0919	2.3000e-004	293.8156
2025	0.0437	0.2578	0.3255	7.7000e-004	2.7300e-003	0.0107	0.0134	7.3000e-004	9.8200e-003	0.0106	0.0000	67.7607	67.7607	0.0211	6.0000e-005	68.3040
Maximum	**0.1466**	**1.2210**	**1.3811**	**3.3100e-003**	**0.0204**	**0.0527**	**0.0633**	**9.3400e-003**	**0.0485**	**0.0513**	**0.0000**	**291.4494**	**291.4494**	**0.0919**	**2.3000e-004**	**293.8156**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	3.6300e-003	0.0144	0.1522	2.8000e-004	9.7300e-003	4.4000e-004	0.0102	4.3500e-003	4.4000e-004	4.7900e-003	0.0000	24.2065	24.2065	7.6000e-003	2.0000e-005	24.4036
2024	0.0430	0.1735	1.8181	3.3100e-003	0.0105	5.3200e-003	0.0158	2.8000e-003	5.3100e-003	8.1100e-003	0.0000	291.4491	291.4491	0.0919	2.3000e-004	293.8153
2025	0.0211	0.0400	0.4250	7.7000e-004	2.7300e-003	1.2300e-003	3.9600e-003	7.3000e-004	1.2200e-003	1.9500e-003	0.0000	67.7606	67.7606	0.0211	6.0000e-005	68.3039
Maximum	**0.0430**	**0.1735**	**1.8181**	**3.3100e-003**	**0.0105**	**5.3200e-003**	**0.0158**	**4.3500e-003**	**5.3100e-003**	**8.1100e-003**	**0.0000**	**291.4491**	**291.4491**	**0.0919**	**2.3000e-004**	**293.8153**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**66.77**	**85.80**	**-31.30**	**0.00**	**31.69**	**89.85**	**70.76**	**38.77**	**89.00**	**80.52**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**11-27-2023**	**2-26-2024**	0.3451	0.0511
2	**2-27-2024**	**5-26-2024**	0.3356	0.0531
3	**5-27-2024**	**8-26-2024**	0.3429	0.0542
4	**8-27-2024**	**11-26-2024**	0.3430	0.0543
5	**11-27-2024**	**2-26-2025**	0.3223	0.0543
6	**2-27-2025**	**5-26-2025**	0.1018	0.0264
		Highest	0.3451	0.0543

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0196	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004
Energy	5.3000e-004	4.7900e-003	4.0300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	12.1258	12.1258	6.8000e-004	1.7000e-004	12.1925
Mobile	8.0000e-005	1.1000e-004	7.7000e-004	0.0000	1.7000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.1443	0.1443	1.0000e-005	1.0000e-005	0.1466
Waste						0.0000	0.0000		0.0000	0.0000	1.1855	0.0000	1.1855	0.0701	0.0000	2.9369
Water						0.0000	0.0000		0.0000	0.0000	0.3456	1.0452	1.3908	0.0356	8.5000e-004	2.5332
Total	**0.0202**	**4.9000e-003**	**4.8500e-003**	**3.0000e-005**	**1.7000e-004**	**3.6000e-004**	**5.3000e-004**	**4.0000e-005**	**3.6000e-004**	**4.1000e-004**	**1.5310**	**13.3154**	**14.8464**	**0.1063**	**1.0300e-003**	**17.8093**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0196	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004
Energy	5.3000e-004	4.7900e-003	4.0300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	12.1258	12.1258	6.8000e-004	1.7000e-004	12.1925
Mobile	8.0000e-005	1.1000e-004	7.7000e-004	0.0000	1.7000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.1443	0.1443	1.0000e-005	1.0000e-005	0.1466
Waste						0.0000	0.0000		0.0000	0.0000	1.1855	0.0000	1.1855	0.0701	0.0000	2.9369
Water						0.0000	0.0000		0.0000	0.0000	0.3456	1.0452	1.3908	0.0356	8.5000e-004	2.5332
Total	**0.0202**	**4.9000e-003**	**4.8500e-003**	**3.0000e-005**	**1.7000e-004**	**3.6000e-004**	**5.3000e-004**	**4.0000e-005**	**3.6000e-004**	**4.1000e-004**	**1.5310**	**13.3154**	**14.8464**	**0.1063**	**1.0300e-003**	**17.8093**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/27/2023	11/29/2023	5	3	
2	Grading	Grading	11/30/2023	12/8/2023	5	7	
3	Building Construction	Building Construction	12/11/2023	3/21/2025	5	335	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Architectural Coating	Architectural Coating	3/21/2025	3/27/2025	5	5	
5	Paving	Paving	3/24/2025	3/28/2025	5	5	

Acres of Grading (Site Preparation Phase): 1.5

Acres of Grading (Grading Phase): 5.25

Acres of Paving: 0.01

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,065; Non-Residential Outdoor: 2,355; Striped Parking Area: 39 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.0000e-004	0.0000	8.0000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-004	9.2800e-003	5.8900e-003	1.0000e-005		3.4000e-004	3.4000e-004		3.1000e-004	3.1000e-004	0.0000	1.2824	1.2824	4.1000e-004	0.0000	1.2928
Total	**8.0000e-004**	**9.2800e-003**	**5.8900e-003**	**1.0000e-005**	**8.0000e-004**	**3.4000e-004**	**1.1400e-003**	**9.0000e-005**	**3.1000e-004**	**4.0000e-004**	**0.0000**	**1.2824**	**1.2824**	**4.1000e-004**	**0.0000**	**1.2928**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.6000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0935	0.0935	0.0000	0.0000	0.0944
Total	**4.0000e-005**	**3.0000e-005**	**3.6000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0935**	**0.0935**	**0.0000**	**0.0000**	**0.0944**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.6000e-004	0.0000	3.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8000e-004	7.7000e-004	7.9800e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.2824	1.2824	4.1000e-004	0.0000	1.2928
Total	**1.8000e-004**	**7.7000e-004**	**7.9800e-003**	**1.0000e-005**	**3.6000e-004**	**2.0000e-005**	**3.8000e-004**	**4.0000e-005**	**2.0000e-005**	**6.0000e-005**	**0.0000**	**1.2824**	**1.2824**	**4.1000e-004**	**0.0000**	**1.2928**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.6000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0935	0.0935	0.0000	0.0000	0.0944
Total	**4.0000e-005**	**3.0000e-005**	**3.6000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0935**	**0.0935**	**0.0000**	**0.0000**	**0.0944**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0186	0.0000	0.0186	8.9900e-003	0.0000	8.9900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9300e-003	0.0411	0.0308	7.0000e-005		1.7400e-003	1.7400e-003		1.6000e-003	1.6000e-003	0.0000	5.9213	5.9213	1.9200e-003	0.0000	5.9691
Total	**3.9300e-003**	**0.0411**	**0.0308**	**7.0000e-005**	**0.0186**	**1.7400e-003**	**0.0203**	**8.9900e-003**	**1.6000e-003**	**0.0106**	**0.0000**	**5.9213**	**5.9213**	**1.9200e-003**	**0.0000**	**5.9691**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	8.5000e-004	0.0000	2.8000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.2181	0.2181	1.0000e-005	1.0000e-005	0.2203
Total	**1.0000e-004**	**7.0000e-005**	**8.5000e-004**	**0.0000**	**2.8000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2181**	**0.2181**	**1.0000e-005**	**1.0000e-005**	**0.2203**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.3700e-003	0.0000	8.3700e-003	4.0500e-003	0.0000	4.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3000e-004	3.5800e-003	0.0388	7.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	5.9213	5.9213	1.9200e-003	0.0000	5.9691
Total	**8.3000e-004**	**3.5800e-003**	**0.0388**	**7.0000e-005**	**8.3700e-003**	**1.1000e-004**	**8.4800e-003**	**4.0500e-003**	**1.1000e-004**	**4.1600e-003**	**0.0000**	**5.9213**	**5.9213**	**1.9200e-003**	**0.0000**	**5.9691**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	8.5000e-004	0.0000	2.8000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.2181	0.2181	1.0000e-005	1.0000e-005	0.2203
Total	**1.0000e-004**	**7.0000e-005**	**8.5000e-004**	**0.0000**	**2.8000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2181**	**0.2181**	**1.0000e-005**	**1.0000e-005**	**0.2203**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.5200e-003	0.0749	0.0779	1.8000e-004		3.3700e-003	3.3700e-003		3.1000e-003	3.1000e-003	0.0000	16.2239	16.2239	5.2500e-003	0.0000	16.3550
Total	**8.5200e-003**	**0.0749**	**0.0779**	**1.8000e-004**		**3.3700e-003**	**3.3700e-003**		**3.1000e-003**	**3.1000e-003**	**0.0000**	**16.2239**	**16.2239**	**5.2500e-003**	**0.0000**	**16.3550**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.6000e-004	1.8100e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4674	0.4674	1.0000e-005	1.0000e-005	0.4720
Total	**2.2000e-004**	**1.6000e-004**	**1.8100e-003**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**6.1000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4674**	**0.4674**	**1.0000e-005**	**1.0000e-005**	**0.4720**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.2600e-003	9.7900e-003	0.1024	1.8000e-004		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	16.2238	16.2238	5.2500e-003	0.0000	16.3550
Total	**2.2600e-003**	**9.7900e-003**	**0.1024**	**1.8000e-004**		**3.0000e-004**	**3.0000e-004**		**3.0000e-004**	**3.0000e-004**	**0.0000**	**16.2238**	**16.2238**	**5.2500e-003**	**0.0000**	**16.3550**

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3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.6000e-004	1.8100e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4674	0.4674	1.0000e-005	1.0000e-005	0.4720
Total	**2.2000e-004**	**1.6000e-004**	**1.8100e-003**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**6.1000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4674**	**0.4674**	**1.0000e-005**	**1.0000e-005**	**0.4720**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1431	1.2185	1.3516	3.2300e-003		0.0527	0.0527		0.0485	0.0485	0.0000	283.4759	283.4759	0.0917	0.0000	285.7680
Total	**0.1431**	**1.2185**	**1.3516**	**3.2300e-003**		**0.0527**	**0.0527**		**0.0485**	**0.0485**	**0.0000**	**283.4759**	**283.4759**	**0.0917**	**0.0000**	**285.7680**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5600e-003	2.4300e-003	0.0295	9.0000e-005	0.0105	5.0000e-005	0.0106	2.8000e-003	5.0000e-005	2.8400e-003	0.0000	7.9735	7.9735	2.4000e-004	2.3000e-004	8.0476
Total	**3.5600e-003**	**2.4300e-003**	**0.0295**	**9.0000e-005**	**0.0105**	**5.0000e-005**	**0.0106**	**2.8000e-003**	**5.0000e-005**	**2.8400e-003**	**0.0000**	**7.9735**	**7.9735**	**2.4000e-004**	**2.3000e-004**	**8.0476**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0395	0.1710	1.7886	3.2300e-003		5.2600e-003	5.2600e-003		5.2600e-003	5.2600e-003	0.0000	283.4756	283.4756	0.0917	0.0000	285.7676
Total	**0.0395**	**0.1710**	**1.7886**	**3.2300e-003**		**5.2600e-003**	**5.2600e-003**		**5.2600e-003**	**5.2600e-003**	**0.0000**	**283.4756**	**283.4756**	**0.0917**	**0.0000**	**285.7676**

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3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5600e-003	2.4300e-003	0.0295	9.0000e-005	0.0105	5.0000e-005	0.0106	2.8000e-003	5.0000e-005	2.8400e-003	0.0000	7.9735	7.9735	2.4000e-004	2.3000e-004	8.0476
Total	**3.5600e-003**	**2.4300e-003**	**0.0295**	**9.0000e-005**	**0.0105**	**5.0000e-005**	**0.0106**	**2.8000e-003**	**5.0000e-005**	**2.8400e-003**	**0.0000**	**7.9735**	**7.9735**	**2.4000e-004**	**2.3000e-004**	**8.0476**

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0298	0.2421	0.2962	7.1000e-004		9.9700e-003	9.9700e-003		9.1700e-003	9.1700e-003	0.0000	62.7519	62.7519	0.0203	0.0000	63.2593
Total	**0.0298**	**0.2421**	**0.2962**	**7.1000e-004**		**9.9700e-003**	**9.9700e-003**		**9.1700e-003**	**9.1700e-003**	**0.0000**	**62.7519**	**62.7519**	**0.0203**	**0.0000**	**63.2593**

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3.4 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4000e-004	4.8000e-004	6.1100e-003	2.0000e-005	2.3300e-003	1.0000e-005	2.3400e-003	6.2000e-004	1.0000e-005	6.3000e-004	0.0000	1.7231	1.7231	5.0000e-005	5.0000e-005	1.7384
Total	**7.4000e-004**	**4.8000e-004**	**6.1100e-003**	**2.0000e-005**	**2.3300e-003**	**1.0000e-005**	**2.3400e-003**	**6.2000e-004**	**1.0000e-005**	**6.3000e-004**	**0.0000**	**1.7231**	**1.7231**	**5.0000e-005**	**5.0000e-005**	**1.7384**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.7400e-003	0.0379	0.3960	7.1000e-004		1.1700e-003	1.1700e-003		1.1700e-003	1.1700e-003	0.0000	62.7518	62.7518	0.0203	0.0000	63.2592
Total	**8.7400e-003**	**0.0379**	**0.3960**	**7.1000e-004**		**1.1700e-003**	**1.1700e-003**		**1.1700e-003**	**1.1700e-003**	**0.0000**	**62.7518**	**62.7518**	**0.0203**	**0.0000**	**63.2592**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4000e-004	4.8000e-004	6.1100e-003	2.0000e-005	2.3300e-003	1.0000e-005	2.3400e-003	6.2000e-004	1.0000e-005	6.3000e-004	0.0000	1.7231	1.7231	5.0000e-005	5.0000e-005	1.7384
Total	**7.4000e-004**	**4.8000e-004**	**6.1100e-003**	**2.0000e-005**	**2.3300e-003**	**1.0000e-005**	**2.3400e-003**	**6.2000e-004**	**1.0000e-005**	**6.3000e-004**	**0.0000**	**1.7231**	**1.7231**	**5.0000e-005**	**5.0000e-005**	**1.7384**

3.5 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0111					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3000e-004	2.8600e-003	4.5200e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.6383	0.6383	3.0000e-005	0.0000	0.6392
Total	**0.0116**	**2.8600e-003**	**4.5200e-003**	**1.0000e-005**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**	**0.0000**	**0.6383**	**0.6383**	**3.0000e-005**	**0.0000**	**0.6392**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.3000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1485	0.1485	0.0000	0.0000	0.1499
Total	**6.0000e-005**	**4.0000e-005**	**5.3000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1485**	**0.1485**	**0.0000**	**0.0000**	**0.1499**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0111					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.0000e-005	3.2000e-004	4.5800e-003	1.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.6383	0.6383	3.0000e-005	0.0000	0.6392
Total	**0.0112**	**3.2000e-004**	**4.5800e-003**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.6383**	**0.6383**	**3.0000e-005**	**0.0000**	**0.6392**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.3000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1485	0.1485	0.0000	0.0000	0.1499
Total	**6.0000e-005**	**4.0000e-005**	**5.3000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1485**	**0.1485**	**0.0000**	**0.0000**	**0.1499**

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4100e-003	0.0123	0.0176	3.0000e-005		5.5000e-004	5.5000e-004		5.1000e-004	5.1000e-004	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.4100e-003**	**0.0123**	**0.0176**	**3.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.1000e-004**	**5.1000e-004**	**0.0000**	**2.3502**	**2.3502**	**6.8000e-004**	**0.0000**	**2.3673**

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3.6 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.3000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1485	0.1485	0.0000	0.0000	0.1499
Total	**6.0000e-005**	**4.0000e-005**	**5.3000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1485**	**0.1485**	**0.0000**	**0.0000**	**0.1499**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.8000e-004	1.2100e-003	0.0173	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.8000e-004**	**1.2100e-003**	**0.0173**	**3.0000e-005**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**2.3502**	**2.3502**	**6.8000e-004**	**0.0000**	**2.3673**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.3000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1485	0.1485	0.0000	0.0000	0.1499
Total	**6.0000e-005**	**4.0000e-005**	**5.3000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1485**	**0.1485**	**0.0000**	**0.0000**	**0.1499**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	8.0000e-005	1.1000e-004	7.7000e-004	0.0000	1.7000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.1443	0.1443	1.0000e-005	1.0000e-005	0.1466
Unmitigated	8.0000e-005	1.1000e-004	7.7000e-004	0.0000	1.7000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.1443	0.1443	1.0000e-005	1.0000e-005	0.1466

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.24	0.00	0.00	447	447
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.24	0.00	0.00	447	447

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	0.00	100.00	0.00	100	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.523110	0.057023	0.188851	0.138134	0.029446	0.007696	0.010914	0.006163	0.000818	0.000438	0.030081	0.001523	0.005803
Other Non-Asphalt Surfaces	0.523110	0.057023	0.188851	0.138134	0.029446	0.007696	0.010914	0.006163	0.000818	0.000438	0.030081	0.001523	0.005803

5.0 Energy Detail

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6.9079	6.9079	5.8000e-004	7.0000e-005	6.9436
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6.9079	6.9079	5.8000e-004	7.0000e-005	6.9436
NaturalGas Mitigated	5.3000e-004	4.7900e-003	4.0300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.2179	5.2179	1.0000e-004	1.0000e-004	5.2489
NaturalGas Unmitigated	5.3000e-004	4.7900e-003	4.0300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.2179	5.2179	1.0000e-004	1.0000e-004	5.2489

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	97779.6	5.3000e-004	4.7900e-003	4.0300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.2179	5.2179	1.0000e-004	1.0000e-004	5.2489
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**5.3000e-004**	**4.7900e-003**	**4.0300e-003**	**3.0000e-005**		**3.6000e-004**	**3.6000e-004**		**3.6000e-004**	**3.6000e-004**	**0.0000**	**5.2179**	**5.2179**	**1.0000e-004**	**1.0000e-004**	**5.2489**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	97779.6	5.3000e-004	4.7900e-003	4.0300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.2179	5.2179	1.0000e-004	1.0000e-004	5.2489
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**5.3000e-004**	**4.7900e-003**	**4.0300e-003**	**3.0000e-005**		**3.6000e-004**	**3.6000e-004**		**3.6000e-004**	**3.6000e-004**	**0.0000**	**5.2179**	**5.2179**	**1.0000e-004**	**1.0000e-004**	**5.2489**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	38951.7	6.9079	5.8000e-004	7.0000e-005	6.9436
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**6.9079**	**5.8000e-004**	**7.0000e-005**	**6.9436**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	38951.7	6.9079	5.8000e-004	7.0000e-005	6.9436
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**6.9079**	**5.8000e-004**	**7.0000e-005**	**6.9436**

6.0 Area Detail

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0196	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004
Unmitigated	0.0196	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.1100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0184					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004
Total	**0.0196**	**0.0000**	**5.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-004**	**1.0000e-004**	**0.0000**	**0.0000**	**1.0000e-004**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.1100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0184					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004
Total	**0.0196**	**0.0000**	**5.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-004**	**1.0000e-004**	**0.0000**	**0.0000**	**1.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.3908	0.0356	8.5000e-004	2.5332
Unmitigated	1.3908	0.0356	8.5000e-004	2.5332

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	1.08919 / 0	1.3908	0.0356	8.5000e-004	2.5332
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.3908**	**0.0356**	**8.5000e-004**	**2.5332**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	1.08919 / 0	1.3908	0.0356	8.5000e-004	2.5332
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.3908**	**0.0356**	**8.5000e-004**	**2.5332**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.1855	0.0701	0.0000	2.9369
Unmitigated	1.1855	0.0701	0.0000	2.9369

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	5.84	1.1855	0.0701	0.0000	2.9369
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**1.1855**	**0.0701**	**0.0000**	**2.9369**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	5.84	1.1855	0.0701	0.0000	2.9369
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**1.1855**	**0.0701**	**0.0000**	**2.9369**

9.0 Operational Offroad

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation

South Central Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	4.71	1000sqft	0.29	4,710.00	0
Other Non-Asphalt Surfaces	0.65	1000sqft	0.01	650.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Infrastructure improvements are assumed 10 percent of pipeline area. Total square feet = (900 sf booster pump station x 38,100 pipeline(.10)) = 4,710 sf. And 130 LF pipeline replaced at Rincon Pump Plant. 8,900 sf of distrubance area for BPS-B

Construction Phase - Construction Schedule adjusted to match applicant provided schedule.

Off-road Equipment - Used default construction equipment list.

Off-road Equipment - Based on project details, added off-highway trucks to default construction equipment list.

Off-road Equipment - Based on project details, added excavators to other default equipment list.

Off-road Equipment - Used default construction equipment list

Off-road Equipment - Used Default construction equipment

Trips and VMT - Trips based on information provided by the applicant.

Grading -

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating - Based on VCAPCD Rule 74.2 Architectural Coating

Vehicle Trips - 50 maintenance trips per year. Assume all primary C-C trips

Area Coating - Based on VCAPCD Rule 74.2 Architectural Coating

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on VCAPCD Rule 55

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	1.00	3.00
tblConstructionPhase	NumDays	2.00	7.00
tblConstructionPhase	NumDays	100.00	335.00
tblLandUse	LotAcreage	0.11	0.29
tblTripsAndVMT	VendorTripNumber	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	2.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblVehicleTrips	CC_TTP	28.00	100.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.99	0.00
tblVehicleTrips	SU_TR	5.00	0.00
tblVehicleTrips	WD_TR	4.96	0.05

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.1650	11.7461	10.6323	0.0253	5.3941	0.4963	5.8904	2.5903	0.4566	3.0470	0.0000	2,455.4405	2,455.4405	0.7733	1.9200e-003	2,475.3447
2024	1.1191	9.3184	10.5473	0.0253	0.0822	0.4026	0.4847	0.0218	0.3704	0.3922	0.0000	2,454.6171	2,454.6171	0.7734	1.7900e-003	2,474.4836
2025	5.7068	9.5234	12.4516	0.0289	0.1643	0.3960	0.5603	0.0436	0.3684	0.4120	0.0000	2,801.9519	2,801.9519	0.7902	3.3400e-003	2,822.7033
Maximum	**5.7068**	**11.7461**	**12.4516**	**0.0289**	**5.3941**	**0.4963**	**5.8904**	**2.5903**	**0.4566**	**3.0470**	**0.0000**	**2,801.9519**	**2,801.9519**	**0.7902**	**3.3400e-003**	**2,822.7033**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.3302	1.3243	13.9002	0.0253	2.4725	0.0406	2.5044	1.1776	0.0406	1.2095	0.0000	2,455.4405	2,455.4405	0.7733	1.9200e-003	2,475.3447
2024	0.3284	1.3223	13.8830	0.0253	0.0822	0.0406	0.1227	0.0218	0.0405	0.0623	0.0000	2,454.6171	2,454.6171	0.7734	1.7900e-003	2,474.4836
2025	4.8384	1.4643	15.9147	0.0289	0.1643	0.0449	0.2092	0.0436	0.0448	0.0884	0.0000	2,801.9519	2,801.9519	0.7902	3.3400e-003	2,822.7033
Maximum	**4.8384**	**1.4643**	**15.9147**	**0.0289**	**2.4725**	**0.0449**	**2.5044**	**1.1776**	**0.0448**	**1.2095**	**0.0000**	**2,801.9519**	**2,801.9519**	**0.7902**	**3.3400e-003**	**2,822.7033**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**31.21**	**86.56**	**-29.93**	**0.00**	**51.80**	**90.26**	**59.10**	**53.19**	**89.46**	**64.68**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1072	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003
Energy	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037
Mobile	6.7000e-004	7.6000e-004	5.7200e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004		1.2548	1.2548	8.0000e-005	6.0000e-005	1.2739
Total	**0.1107**	**0.0270**	**0.0283**	**1.7000e-004**	**1.3200e-003**	**2.0100e-003**	**3.3300e-003**	**3.5000e-004**	**2.0100e-003**	**2.3600e-003**		**32.7723**	**32.7723**	**6.8000e-004**	**6.4000e-004**	**32.9788**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1072	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003
Energy	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037
Mobile	6.7000e-004	7.6000e-004	5.7200e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004		1.2548	1.2548	8.0000e-005	6.0000e-005	1.2739
Total	**0.1107**	**0.0270**	**0.0283**	**1.7000e-004**	**1.3200e-003**	**2.0100e-003**	**3.3300e-003**	**3.5000e-004**	**2.0100e-003**	**2.3600e-003**		**32.7723**	**32.7723**	**6.8000e-004**	**6.4000e-004**	**32.9788**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/27/2023	11/29/2023	5	3	
2	Grading	Grading	11/30/2023	12/8/2023	5	7	
3	Building Construction	Building Construction	12/11/2023	3/21/2025	5	335	
4	Architectural Coating	Architectural Coating	3/21/2025	3/27/2025	5	5	
5	Paving	Paving	3/24/2025	3/28/2025	5	5	

Acres of Grading (Site Preparation Phase): 1.5

Acres of Grading (Grading Phase): 5.25

Acres of Paving: 0.01

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,065; Non-Residential Outdoor: 2,355; Striped Parking Area: 39 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**		**942.4317**	**942.4317**	**0.3048**		**950.0517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0289	0.0186	0.2468	6.9000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9432	70.9432	2.0900e-003	1.9200e-003	71.5675
Total	**0.0289**	**0.0186**	**0.2468**	**6.9000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**70.9432**	**70.9432**	**2.0900e-003**	**1.9200e-003**	**71.5675**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	0.1191	0.5162	5.3170	9.7300e-003		0.0159	0.0159		0.0159	0.0159	0.0000	942.4317	942.4317	0.3048		950.0517
Total	**0.1191**	**0.5162**	**5.3170**	**9.7300e-003**	**0.2386**	**0.0159**	**0.2545**	**0.0258**	**0.0159**	**0.0416**	**0.0000**	**942.4317**	**942.4317**	**0.3048**		**950.0517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0289	0.0186	0.2468	6.9000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9432	70.9432	2.0900e-003	1.9200e-003	71.5675
Total	**0.0289**	**0.0186**	**0.2468**	**6.9000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**70.9432**	**70.9432**	**2.0900e-003**	**1.9200e-003**	**71.5675**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	1.1222	11.7275	8.8094	0.0193		0.4959	0.4959		0.4562	0.4562		1,864.8770	1,864.8770	0.6031		1,879.9554
Total	**1.1222**	**11.7275**	**8.8094**	**0.0193**	**5.3119**	**0.4959**	**5.8078**	**2.5686**	**0.4562**	**3.0248**		**1,864.8770**	**1,864.8770**	**0.6031**		**1,879.9554**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0289	0.0186	0.2468	6.9000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9432	70.9432	2.0900e-003	1.9200e-003	71.5675
Total	**0.0289**	**0.0186**	**0.2468**	**6.9000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**70.9432**	**70.9432**	**2.0900e-003**	**1.9200e-003**	**71.5675**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3904	0.0000	2.3904	1.1559	0.0000	1.1559			0.0000			0.0000
Off-Road	0.2360	1.0228	11.0737	0.0193		0.0315	0.0315		0.0315	0.0315	0.0000	1,864.8770	1,864.8770	0.6031		1,879.9554
Total	**0.2360**	**1.0228**	**11.0737**	**0.0193**	**2.3904**	**0.0315**	**2.4218**	**1.1559**	**0.0315**	**1.1873**	**0.0000**	**1,864.8770**	**1,864.8770**	**0.6031**		**1,879.9554**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0289	0.0186	0.2468	6.9000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9432	70.9432	2.0900e-003	1.9200e-003	71.5675
Total	**0.0289**	**0.0186**	**0.2468**	**6.9000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**70.9432**	**70.9432**	**2.0900e-003**	**1.9200e-003**	**71.5675**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1361	9.9865	10.3855	0.0246		0.4493	0.4493		0.4133	0.4133		2,384.4974	2,384.4974	0.7712		2,403.7772
Total	**1.1361**	**9.9865**	**10.3855**	**0.0246**		**0.4493**	**0.4493**		**0.4133**	**0.4133**		**2,384.4974**	**2,384.4974**	**0.7712**		**2,403.7772**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0289	0.0186	0.2468	6.9000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9432	70.9432	2.0900e-003	1.9200e-003	71.5675
Total	**0.0289**	**0.0186**	**0.2468**	**6.9000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**70.9432**	**70.9432**	**2.0900e-003**	**1.9200e-003**	**71.5675**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3013	1.3057	13.6534	0.0246		0.0402	0.0402		0.0402	0.0402	0.0000	2,384.4974	2,384.4974	0.7712		2,403.7772
Total	**0.3013**	**1.3057**	**13.6534**	**0.0246**		**0.0402**	**0.0402**		**0.0402**	**0.0402**	**0.0000**	**2,384.4974**	**2,384.4974**	**0.7712**		**2,403.7772**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0289	0.0186	0.2468	6.9000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.9432	70.9432	2.0900e-003	1.9200e-003	71.5675
Total	**0.0289**	**0.0186**	**0.2468**	**6.9000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**70.9432**	**70.9432**	**2.0900e-003**	**1.9200e-003**	**71.5675**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0921	9.3018	10.3177	0.0246		0.4022	0.4022		0.3700	0.3700		2,385.3338	2,385.3338	0.7715		2,404.6205
Total	**1.0921**	**9.3018**	**10.3177**	**0.0246**		**0.4022**	**0.4022**		**0.3700**	**0.3700**		**2,385.3338**	**2,385.3338**	**0.7715**		**2,404.6205**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0271	0.0166	0.2296	6.7000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		69.2833	69.2833	1.8900e-003	1.7900e-003	69.8631
Total	**0.0271**	**0.0166**	**0.2296**	**6.7000e-004**	**0.0822**	**4.0000e-004**	**0.0826**	**0.0218**	**3.7000e-004**	**0.0222**		**69.2833**	**69.2833**	**1.8900e-003**	**1.7900e-003**	**69.8631**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3013	1.3057	13.6534	0.0246		0.0402	0.0402		0.0402	0.0402	0.0000	2,385.3338	2,385.3338	0.7715		2,404.6205
Total	**0.3013**	**1.3057**	**13.6534**	**0.0246**		**0.0402**	**0.0402**		**0.0402**	**0.0402**	**0.0000**	**2,385.3338**	**2,385.3338**	**0.7715**		**2,404.6205**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0271	0.0166	0.2296	6.7000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		69.2833	69.2833	1.8900e-003	1.7900e-003	69.8631
Total	**0.0271**	**0.0166**	**0.2296**	**6.7000e-004**	**0.0822**	**4.0000e-004**	**0.0826**	**0.0218**	**3.7000e-004**	**0.0222**		**69.2833**	**69.2833**	**1.8900e-003**	**1.7900e-003**	**69.8631**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0286	8.3480	10.2137	0.0246		0.3437	0.3437		0.3162	0.3162		2,385.2465	2,385.2465	0.7714		2,404.5324
Total	**1.0286**	**8.3480**	**10.2137**	**0.0246**		**0.3437**	**0.3437**		**0.3162**	**0.3162**		**2,385.2465**	**2,385.2465**	**0.7714**		**2,404.5324**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0254	0.0149	0.2144	6.5000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		67.6287	67.6287	1.7200e-003	1.6700e-003	68.1695
Total	**0.0254**	**0.0149**	**0.2144**	**6.5000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**67.6287**	**67.6287**	**1.7200e-003**	**1.6700e-003**	**68.1695**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3013	1.3057	13.6534	0.0246		0.0402	0.0402		0.0402	0.0402	0.0000	2,385.2465	2,385.2465	0.7714		2,404.5324
Total	**0.3013**	**1.3057**	**13.6534**	**0.0246**		**0.0402**	**0.0402**		**0.0402**	**0.0402**	**0.0000**	**2,385.2465**	**2,385.2465**	**0.7714**		**2,404.5324**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0254	0.0149	0.2144	6.5000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		67.6287	67.6287	1.7200e-003	1.6700e-003	68.1695
Total	**0.0254**	**0.0149**	**0.2144**	**6.5000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**67.6287**	**67.6287**	**1.7200e-003**	**1.6700e-003**	**68.1695**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.4566					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**4.6274**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0254	0.0149	0.2144	6.5000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		67.6287	67.6287	1.7200e-003	1.6700e-003	68.1695
Total	**0.0254**	**0.0149**	**0.2144**	**6.5000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**67.6287**	**67.6287**	**1.7200e-003**	**1.6700e-003**	**68.1695**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.4566					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**4.4863**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0254	0.0149	0.2144	6.5000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		67.6287	67.6287	1.7200e-003	1.6700e-003	68.1695
Total	**0.0254**	**0.0149**	**0.2144**	**6.5000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**67.6287**	**67.6287**	**1.7200e-003**	**1.6700e-003**	**68.1695**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5638	4.9206	7.0257	0.0113		0.2186	0.2186		0.2046	0.2046		1,036.2711	1,036.2711	0.3019		1,043.8179
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5638**	**4.9206**	**7.0257**	**0.0113**		**0.2186**	**0.2186**		**0.2046**	**0.2046**		**1,036.2711**	**1,036.2711**	**0.3019**		**1,043.8179**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0254	0.0149	0.2144	6.5000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		67.6287	67.6287	1.7200e-003	1.6700e-003	68.1695
Total	**0.0254**	**0.0149**	**0.2144**	**6.5000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**67.6287**	**67.6287**	**1.7200e-003**	**1.6700e-003**	**68.1695**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1119	0.4851	6.9028	0.0113		0.0149	0.0149		0.0149	0.0149	0.0000	1,036.2711	1,036.2711	0.3019		1,043.8179
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.1119**	**0.4851**	**6.9028**	**0.0113**		**0.0149**	**0.0149**		**0.0149**	**0.0149**	**0.0000**	**1,036.2711**	**1,036.2711**	**0.3019**		**1,043.8179**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0254	0.0149	0.2144	6.5000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		67.6287	67.6287	1.7200e-003	1.6700e-003	68.1695
Total	**0.0254**	**0.0149**	**0.2144**	**6.5000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**67.6287**	**67.6287**	**1.7200e-003**	**1.6700e-003**	**68.1695**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.7000e-004	7.6000e-004	5.7200e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004		1.2548	1.2548	8.0000e-005	6.0000e-005	1.2739
Unmitigated	6.7000e-004	7.6000e-004	5.7200e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004		1.2548	1.2548	8.0000e-005	6.0000e-005	1.2739

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.24	0.00	0.00	447	447
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.24	0.00	0.00	447	447

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	0.00	100.00	0.00	100	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.523110	0.057023	0.188851	0.138134	0.029446	0.007696	0.010914	0.006163	0.000818	0.000438	0.030081	0.001523	0.005803
Other Non-Asphalt Surfaces	0.523110	0.057023	0.188851	0.138134	0.029446	0.007696	0.010914	0.006163	0.000818	0.000438	0.030081	0.001523	0.005803

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037
NaturalGas Unmitigated	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	267.889	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.8900e-003**	**0.0263**	**0.0221**	**1.6000e-004**		**2.0000e-003**	**2.0000e-003**		**2.0000e-003**	**2.0000e-003**		**31.5164**	**31.5164**	**6.0000e-004**	**5.8000e-004**	**31.7037**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0.267889	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.8900e-003**	**0.0263**	**0.0221**	**1.6000e-004**		**2.0000e-003**	**2.0000e-003**		**2.0000e-003**	**2.0000e-003**		**31.5164**	**31.5164**	**6.0000e-004**	**5.8000e-004**	**31.7037**

6.0 Area Detail

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1072	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003
Unmitigated	0.1072	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.1000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1010					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003
Total	**0.1072**	**0.0000**	**5.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.1700e-003**	**1.1700e-003**	**0.0000**		**1.2500e-003**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.1000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1010					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003
Total	**0.1072**	**0.0000**	**5.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.1700e-003**	**1.1700e-003**	**0.0000**		**1.2500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation

South Central Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	4.71	1000sqft	0.29	4,710.00	0
Other Non-Asphalt Surfaces	0.65	1000sqft	0.01	650.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Infrastructure improvements are assumed 10 percent of pipeline area. Total square feet = (900 sf booster pump station x 38,100 pipeline(.10)) = 4,710 sf. And 130 LF pipeline replaced at Rincon Pump Plant. 8,900 sf of distrubance area for BPS-B

Construction Phase - Construction Schedule adjusted to match applicant provided schedule.

Off-road Equipment - Used default construction equipment list.

Off-road Equipment - Based on project details, added off-highway trucks to default construction equipment list.

Off-road Equipment - Based on project details, added excavators to other default equipment list.

Off-road Equipment - Used default construction equipment list

Off-road Equipment - Used Default construction equipment

Trips and VMT - Trips based on information provided by the applicant.

Grading -

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating - Based on VCAPCD Rule 74.2 Architectural Coating

Vehicle Trips - 50 maintenance trips per year. Assume all primary C-C trips

Area Coating - Based on VCAPCD Rule 74.2 Architectural Coating

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on VCAPCD Rule 55

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	1.00	3.00
tblConstructionPhase	NumDays	2.00	7.00
tblConstructionPhase	NumDays	100.00	335.00
tblLandUse	LotAcreage	0.11	0.29
tblTripsAndVMT	VendorTripNumber	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	2.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblVehicleTrips	CC_TTP	28.00	100.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.99	0.00
tblVehicleTrips	SU_TR	5.00	0.00
tblVehicleTrips	WD_TR	4.96	0.05

2.0 Emissions Summary

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.1676	11.7489	10.6309	0.0253	5.3941	0.4963	5.8904	2.5903	0.4566	3.0470	0.0000	2,452.8149	2,452.8149	0.7735	2.1100e-003	2,472.7818
2024	1.1216	9.3209	10.5464	0.0253	0.0822	0.4026	0.4847	0.0218	0.3704	0.3922	0.0000	2,452.0590	2,452.0590	0.7735	1.9700e-003	2,471.9838
2025	5.7117	9.5280	12.4508	0.0289	0.1643	0.3960	0.5603	0.0436	0.3684	0.4120	0.0000	2,796.9710	2,796.9710	0.7906	3.6800e-003	2,817.8310
Maximum	**5.7117**	**11.7489**	**12.4508**	**0.0289**	**5.3941**	**0.4963**	**5.8904**	**2.5903**	**0.4566**	**3.0470**	**0.0000**	**2,796.9710**	**2,796.9710**	**0.7906**	**3.6800e-003**	**2,817.8310**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.3328	1.3271	13.8988	0.0253	2.4725	0.0406	2.5044	1.1776	0.0406	1.2095	0.0000	2,452.8148	2,452.8148	0.7735	2.1100e-003	2,472.7818
2024	0.3309	1.3249	13.8821	0.0253	0.0822	0.0406	0.1227	0.0218	0.0405	0.0623	0.0000	2,452.0590	2,452.0590	0.7735	1.9700e-003	2,471.9838
2025	4.8433	1.4689	15.9138	0.0289	0.1643	0.0449	0.2092	0.0436	0.0448	0.0884	0.0000	2,796.9710	2,796.9710	0.7906	3.6800e-003	2,817.8310
Maximum	**4.8433**	**1.4689**	**15.9138**	**0.0289**	**2.4725**	**0.0449**	**2.5044**	**1.1776**	**0.0448**	**1.2095**	**0.0000**	**2,796.9710**	**2,796.9710**	**0.7906**	**3.6800e-003**	**2,817.8310**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**31.17**	**86.53**	**-29.94**	**0.00**	**51.80**	**90.26**	**59.10**	**53.19**	**89.46**	**64.68**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1072	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003
Energy	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037
Mobile	6.5000e-004	8.3000e-004	6.1200e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004		1.2201	1.2201	9.0000e-005	6.0000e-005	1.2405
Total	**0.1107**	**0.0271**	**0.0287**	**1.7000e-004**	**1.3200e-003**	**2.0100e-003**	**3.3300e-003**	**3.5000e-004**	**2.0100e-003**	**2.3600e-003**		**32.7376**	**32.7376**	**6.9000e-004**	**6.4000e-004**	**32.9454**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1072	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003
Energy	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037
Mobile	6.5000e-004	8.3000e-004	6.1200e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004		1.2201	1.2201	9.0000e-005	6.0000e-005	1.2405
Total	**0.1107**	**0.0271**	**0.0287**	**1.7000e-004**	**1.3200e-003**	**2.0100e-003**	**3.3300e-003**	**3.5000e-004**	**2.0100e-003**	**2.3600e-003**		**32.7376**	**32.7376**	**6.9000e-004**	**6.4000e-004**	**32.9454**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/27/2023	11/29/2023	5	3	
2	Grading	Grading	11/30/2023	12/8/2023	5	7	
3	Building Construction	Building Construction	12/11/2023	3/21/2025	5	335	
4	Architectural Coating	Architectural Coating	3/21/2025	3/27/2025	5	5	
5	Paving	Paving	3/24/2025	3/28/2025	5	5	

Acres of Grading (Site Preparation Phase): 1.5

Acres of Grading (Grading Phase): 5.25

Acres of Paving: 0.01

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,065; Non-Residential Outdoor: 2,355; Striped Parking Area: 39 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**		**942.4317**	**942.4317**	**0.3048**		**950.0517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0315	0.0214	0.2453	6.7000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		68.3175	68.3175	2.2700e-003	2.1100e-003	69.0046
Total	**0.0315**	**0.0214**	**0.2453**	**6.7000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**68.3175**	**68.3175**	**2.2700e-003**	**2.1100e-003**	**69.0046**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	0.1191	0.5162	5.3170	9.7300e-003		0.0159	0.0159		0.0159	0.0159	0.0000	942.4317	942.4317	0.3048		950.0517
Total	**0.1191**	**0.5162**	**5.3170**	**9.7300e-003**	**0.2386**	**0.0159**	**0.2545**	**0.0258**	**0.0159**	**0.0416**	**0.0000**	**942.4317**	**942.4317**	**0.3048**		**950.0517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0315	0.0214	0.2453	6.7000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		68.3175	68.3175	2.2700e-003	2.1100e-003	69.0046
Total	**0.0315**	**0.0214**	**0.2453**	**6.7000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**68.3175**	**68.3175**	**2.2700e-003**	**2.1100e-003**	**69.0046**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	1.1222	11.7275	8.8094	0.0193		0.4959	0.4959		0.4562	0.4562		1,864.8770	1,864.8770	0.6031		1,879.9554
Total	**1.1222**	**11.7275**	**8.8094**	**0.0193**	**5.3119**	**0.4959**	**5.8078**	**2.5686**	**0.4562**	**3.0248**		**1,864.8770**	**1,864.8770**	**0.6031**		**1,879.9554**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0315	0.0214	0.2453	6.7000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		68.3175	68.3175	2.2700e-003	2.1100e-003	69.0046
Total	**0.0315**	**0.0214**	**0.2453**	**6.7000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**68.3175**	**68.3175**	**2.2700e-003**	**2.1100e-003**	**69.0046**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3904	0.0000	2.3904	1.1559	0.0000	1.1559			0.0000			0.0000
Off-Road	0.2360	1.0228	11.0737	0.0193		0.0315	0.0315		0.0315	0.0315	0.0000	1,864.8770	1,864.8770	0.6031		1,879.9554
Total	**0.2360**	**1.0228**	**11.0737**	**0.0193**	**2.3904**	**0.0315**	**2.4218**	**1.1559**	**0.0315**	**1.1873**	**0.0000**	**1,864.8770**	**1,864.8770**	**0.6031**		**1,879.9554**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0315	0.0214	0.2453	6.7000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		68.3175	68.3175	2.2700e-003	2.1100e-003	69.0046
Total	**0.0315**	**0.0214**	**0.2453**	**6.7000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**68.3175**	**68.3175**	**2.2700e-003**	**2.1100e-003**	**69.0046**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1361	9.9865	10.3855	0.0246		0.4493	0.4493		0.4133	0.4133		2,384.4974	2,384.4974	0.7712		2,403.7772
Total	**1.1361**	**9.9865**	**10.3855**	**0.0246**		**0.4493**	**0.4493**		**0.4133**	**0.4133**		**2,384.4974**	**2,384.4974**	**0.7712**		**2,403.7772**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0315	0.0214	0.2453	6.7000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		68.3175	68.3175	2.2700e-003	2.1100e-003	69.0046
Total	**0.0315**	**0.0214**	**0.2453**	**6.7000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**68.3175**	**68.3175**	**2.2700e-003**	**2.1100e-003**	**69.0046**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3013	1.3057	13.6534	0.0246		0.0402	0.0402		0.0402	0.0402	0.0000	2,384.4974	2,384.4974	0.7712		2,403.7772
Total	**0.3013**	**1.3057**	**13.6534**	**0.0246**		**0.0402**	**0.0402**		**0.0402**	**0.0402**	**0.0000**	**2,384.4974**	**2,384.4974**	**0.7712**		**2,403.7772**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0315	0.0214	0.2453	6.7000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		68.3175	68.3175	2.2700e-003	2.1100e-003	69.0046
Total	**0.0315**	**0.0214**	**0.2453**	**6.7000e-004**	**0.0822**	**4.2000e-004**	**0.0826**	**0.0218**	**3.9000e-004**	**0.0222**		**68.3175**	**68.3175**	**2.2700e-003**	**2.1100e-003**	**69.0046**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0921	9.3018	10.3177	0.0246		0.4022	0.4022		0.3700	0.3700		2,385.3338	2,385.3338	0.7715		2,404.6205
Total	**1.0921**	**9.3018**	**10.3177**	**0.0246**		**0.4022**	**0.4022**		**0.3700**	**0.3700**		**2,385.3338**	**2,385.3338**	**0.7715**		**2,404.6205**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0296	0.0192	0.2287	6.5000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		66.7252	66.7252	2.0700e-003	1.9700e-003	67.3633
Total	**0.0296**	**0.0192**	**0.2287**	**6.5000e-004**	**0.0822**	**4.0000e-004**	**0.0826**	**0.0218**	**3.7000e-004**	**0.0222**		**66.7252**	**66.7252**	**2.0700e-003**	**1.9700e-003**	**67.3633**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3013	1.3057	13.6534	0.0246		0.0402	0.0402		0.0402	0.0402	0.0000	2,385.3338	2,385.3338	0.7715		2,404.6205
Total	**0.3013**	**1.3057**	**13.6534**	**0.0246**		**0.0402**	**0.0402**		**0.0402**	**0.0402**	**0.0000**	**2,385.3338**	**2,385.3338**	**0.7715**		**2,404.6205**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0296	0.0192	0.2287	6.5000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		66.7252	66.7252	2.0700e-003	1.9700e-003	67.3633
Total	**0.0296**	**0.0192**	**0.2287**	**6.5000e-004**	**0.0822**	**4.0000e-004**	**0.0826**	**0.0218**	**3.7000e-004**	**0.0222**		**66.7252**	**66.7252**	**2.0700e-003**	**1.9700e-003**	**67.3633**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0286	8.3480	10.2137	0.0246		0.3437	0.3437		0.3162	0.3162		2,385.2465	2,385.2465	0.7714		2,404.5324
Total	**1.0286**	**8.3480**	**10.2137**	**0.0246**		**0.3437**	**0.3437**		**0.3162**	**0.3162**		**2,385.2465**	**2,385.2465**	**0.7714**		**2,404.5324**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0278	0.0172	0.2140	6.3000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		65.1382	65.1382	1.8800e-003	1.8400e-003	65.7334
Total	**0.0278**	**0.0172**	**0.2140**	**6.3000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**65.1382**	**65.1382**	**1.8800e-003**	**1.8400e-003**	**65.7334**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3013	1.3057	13.6534	0.0246		0.0402	0.0402		0.0402	0.0402	0.0000	2,385.2465	2,385.2465	0.7714		2,404.5324
Total	**0.3013**	**1.3057**	**13.6534**	**0.0246**		**0.0402**	**0.0402**		**0.0402**	**0.0402**	**0.0000**	**2,385.2465**	**2,385.2465**	**0.7714**		**2,404.5324**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0278	0.0172	0.2140	6.3000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		65.1382	65.1382	1.8800e-003	1.8400e-003	65.7334
Total	**0.0278**	**0.0172**	**0.2140**	**6.3000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**65.1382**	**65.1382**	**1.8800e-003**	**1.8400e-003**	**65.7334**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.4566					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**4.6274**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0278	0.0172	0.2140	6.3000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		65.1382	65.1382	1.8800e-003	1.8400e-003	65.7334
Total	**0.0278**	**0.0172**	**0.2140**	**6.3000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**65.1382**	**65.1382**	**1.8800e-003**	**1.8400e-003**	**65.7334**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.4566					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**4.4863**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0278	0.0172	0.2140	6.3000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		65.1382	65.1382	1.8800e-003	1.8400e-003	65.7334
Total	**0.0278**	**0.0172**	**0.2140**	**6.3000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**65.1382**	**65.1382**	**1.8800e-003**	**1.8400e-003**	**65.7334**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5638	4.9206	7.0257	0.0113		0.2186	0.2186		0.2046	0.2046		1,036.2711	1,036.2711	0.3019		1,043.8179
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5638**	**4.9206**	**7.0257**	**0.0113**		**0.2186**	**0.2186**		**0.2046**	**0.2046**		**1,036.2711**	**1,036.2711**	**0.3019**		**1,043.8179**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0278	0.0172	0.2140	6.3000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		65.1382	65.1382	1.8800e-003	1.8400e-003	65.7334
Total	**0.0278**	**0.0172**	**0.2140**	**6.3000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**65.1382**	**65.1382**	**1.8800e-003**	**1.8400e-003**	**65.7334**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1119	0.4851	6.9028	0.0113		0.0149	0.0149		0.0149	0.0149	0.0000	1,036.2711	1,036.2711	0.3019		1,043.8179
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.1119**	**0.4851**	**6.9028**	**0.0113**		**0.0149**	**0.0149**		**0.0149**	**0.0149**	**0.0000**	**1,036.2711**	**1,036.2711**	**0.3019**		**1,043.8179**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0278	0.0172	0.2140	6.3000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		65.1382	65.1382	1.8800e-003	1.8400e-003	65.7334
Total	**0.0278**	**0.0172**	**0.2140**	**6.3000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**65.1382**	**65.1382**	**1.8800e-003**	**1.8400e-003**	**65.7334**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.5000e-004	8.3000e-004	6.1200e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004		1.2201	1.2201	9.0000e-005	6.0000e-005	1.2405
Unmitigated	6.5000e-004	8.3000e-004	6.1200e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004		1.2201	1.2201	9.0000e-005	6.0000e-005	1.2405

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.24	0.00	0.00	447	447
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.24	0.00	0.00	447	447

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	0.00	100.00	0.00	100	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.523110	0.057023	0.188851	0.138134	0.029446	0.007696	0.010914	0.006163	0.000818	0.000438	0.030081	0.001523	0.005803
Other Non-Asphalt Surfaces	0.523110	0.057023	0.188851	0.138134	0.029446	0.007696	0.010914	0.006163	0.000818	0.000438	0.030081	0.001523	0.005803

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037
NaturalGas Unmitigated	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	267.889	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.8900e-003**	**0.0263**	**0.0221**	**1.6000e-004**		**2.0000e-003**	**2.0000e-003**		**2.0000e-003**	**2.0000e-003**		**31.5164**	**31.5164**	**6.0000e-004**	**5.8000e-004**	**31.7037**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0.267889	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003		31.5164	31.5164	6.0000e-004	5.8000e-004	31.7037
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.8900e-003**	**0.0263**	**0.0221**	**1.6000e-004**		**2.0000e-003**	**2.0000e-003**		**2.0000e-003**	**2.0000e-003**		**31.5164**	**31.5164**	**6.0000e-004**	**5.8000e-004**	**31.7037**

6.0 Area Detail

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1072	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003
Unmitigated	0.1072	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.1000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1010					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003
Total	**0.1072**	**0.0000**	**5.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.1700e-003**	**1.1700e-003**	**0.0000**		**1.2500e-003**

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.1000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1010					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1700e-003	1.1700e-003	0.0000		1.2500e-003
Total	**0.1072**	**0.0000**	**5.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.1700e-003**	**1.1700e-003**	**0.0000**		**1.2500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

VTA-SB Counties Intertie Project - Booster Pump Station B & Improvements - Mitigation - South Central Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Greenhouse Gas Calculations

VTA-SB Counties Intertie Project

Equipment Type	Annual Kilowatt Hours (kWh)	Annual Megawatt Hours (MWh)
Pumps	662,200.00	662.20
Treatment Equipment	2,200.00	2.20
	Total	664.40

SCE Emission Factor (MT CO2e/MWh)[1]	0.25

Equation:

*Annual MWh * SCE Emission Factor = Annual GHG Emissions*

Annual Operational GHG Emissions	Units
166.10	**MT CO_2e/year**

Footnotes:

SCE: Southern California Edison; MT: metric tons

1. Source: https://www.edison.com/content/dam/eix/documents/sustainability/eix-2017-sustainability-report.pdf

Appendix B

Biological Resources Assessment

Ventura-Santa Barbara Counties Intertie Project

Biological Resources Assessment

prepared by

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October 2022

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Executive Summary

Rincon Consultants, Inc. prepared this Biological Resources Assessment (BRA) to document existing conditions and provide a basis for evaluation of potential impacts to sensitive biological resources from implementation of the Ventura-Santa Barbara Counties Intertie Project (project). The project is in the unincorporated southwestern portion of Ventura County and the unincorporated southeastern portion of Santa Barbara County. It involves the construction and operation of potable water infrastructure to connect the Casitas Municipal Water District (Casitas) and Carpinteria Valley Water District (CVWD) water transmission systems. The proposed project would allow Casitas and CVWD to transfer local potable water supplies, as necessary, and improve the resiliency of the local water distribution network. In addition, the project provides Casitas with a means of accessing its allocation of State Water Project water to supplement existing supplies during drought.

Rincon assessed the potential presence and the project's impacts on sensitive biological resources (e.g., special-status species, aquatic resources and riparian habitat, wildlife movement corridors, and locally protected trees) within the proposed project footprint (i.e., areas which are expected to be affected by the proposed project) and a 50-foot survey buffer.

Three California Department of Fish and Wildlife (CDFW) Species of special Concern ("special status") wildlife species were determined to have a high or moderate potential to occur within the Study Area: yellow warbler (*Setophaga petechia*), California legless lizard (*Anniella pulchra*), and San Diego desert woodrat (*Neotoma lepida intermedia*). Additionally, vegetation within and adjacent to the Study Area provides suitable nesting habitat for bird species protected under California Fish and Game Code 3503 and the federal Migratory Bird Treaty Act. Direct and indirect impacts to these special status species and nesting birds are not expected with implementation of recommended avoidance and minimization measures incorporated into the project (e.g., Worker Environmental Awareness Program, Best Management Practices, and pre-construction nesting bird surveys).

Four potentially jurisdictional hydrologic features are present within the Study Area: Rincon Creek, Casitas Creek, Coyote Creek, and an unnamed drainage tributary to Casitas Creek. These features are potentially subject to United States Army Corps of Engineers (USACE) jurisdiction pursuant to Section 404 of the Clean Water Act, Regional Water Quality Control Board (RWQCB) jurisdiction pursuant to Section 401 of the Clean Water Act and the California Water Code (Porter-Cologne Water Quality Control Act), and CDFW pursuant to California Fish and Game Code 1600. Direct and indirect impacts to potentially jurisdictional features will be minimized to a less than significant level with proposed avoidance and minimization measures incorporated into the project.

Locally protected trees are present within the Study Area and may be affected by the proposed project. The project will maintain consistency with local policies and ordinances, including those relating to protected trees, through implementation of proposed avoidance and minimization measures including the preparation of an Arborist Report and Tree Protection Plan.

1 Introduction

Rincon Consultants, Inc. (Rincon) prepared this BRA report to document the current existing conditions and to evaluate the potential for impacts to biological resources during implementation of the project. Casitas is the project's lead agency under the California Environmental Quality Act (CEQA).

1.1 Project Location

The project site is located in the unincorporated southwestern portion of Ventura County and the unincorporated southeastern portion of Santa Barbara County and is approximately 0.3 mile east of the city of Carpinteria. The project site traverses State Route (SR) 192 and SR 150, both of which are under the jurisdiction of the California Department of Transportation (Caltrans). Figure 1 shows the project site in the regional context and Figure 2 provides an overview of the project components. Figure 3a-c shows an overview of the project site, including the pipeline alignment location, booster pump station sites, and infrastructure improvement areas. Figure 3a shows the western portion of the project site, which includes the pipeline alignment and Booster Pump Station A (BPS-A) site. Figure 3b shows the Booster Pump Station B (BPS-B) site. Figure 3c shows the easternmost project components, consisting of improvements to existing Casitas facilities.

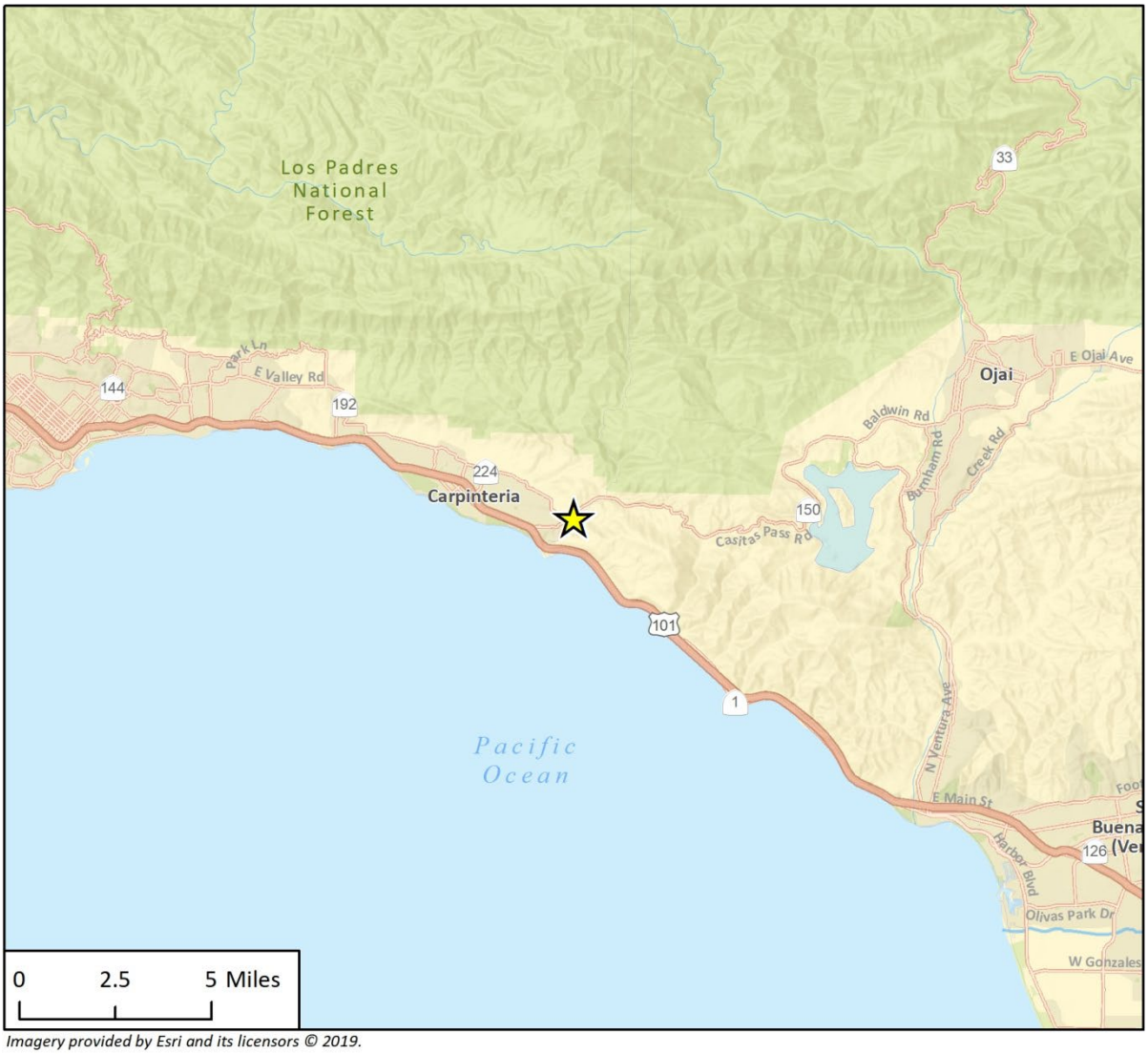
1.2 Project Description

The project involves the construction and operation of potable water infrastructure to connect the CVWD water transmission systems. The proposed project includes approximately 7,600 to 8,160 linear feet (LF; 1.3 to 1.5 miles) of new 16-inch-diameter potable water pipeline, two new booster pump stations, replacement of select portions of the existing Rincon Main, and improvements to infrastructure at other existing Casitas facilities. The pipeline would traverse the boundary between Ventura and Santa Barbara counties and act as a two-way intertie to allow the transfer of water between Casitas and CVWD, as necessary.

1.2.1 Comprehensive Water Resources Plan Background

In June 2020, Casitas developed a Draft Comprehensive Water Resources Plan (CWRP) to identify, analyze, and prioritize strategies for providing a reliable water supply to meet the future needs of Casitas' customers. The Draft CWRP was prepared in response to the recent extended drought in California, which resulted in historic low storage levels in Lake Casitas, and in response to concerns about the impacts of climate change on future supplies. With stakeholder engagement, Casitas developed an analysis of future system supplies and demands to evaluate future water needs. The Draft CWRP included goals for long-term water supply augmentation, short-term risk management, and portfolio diversification. These goals informed the investigation and prioritization of future water supply options. The Draft CWRP identified all potential supply options, then screened those to select the most feasible options, then combined those feasible options into portfolios (Casitas 2020). The proposed project is identified as one of the water supply options in the Draft CWRP's recommended water supply portfolio. It is the only option addressing all three goals for long-term water supply augmentation, short-term risk mitigation, and portfolio diversification (Casitas 2020).

Figure 1 Regional Location Map



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Project Location

N

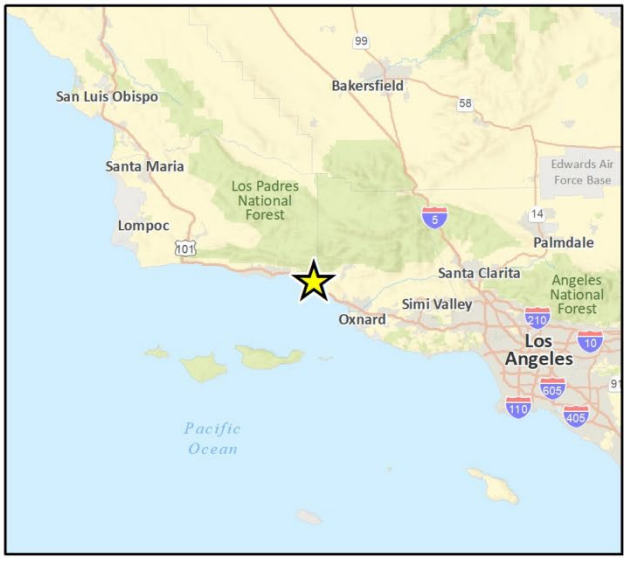

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Figure 2 Overview of Project Site

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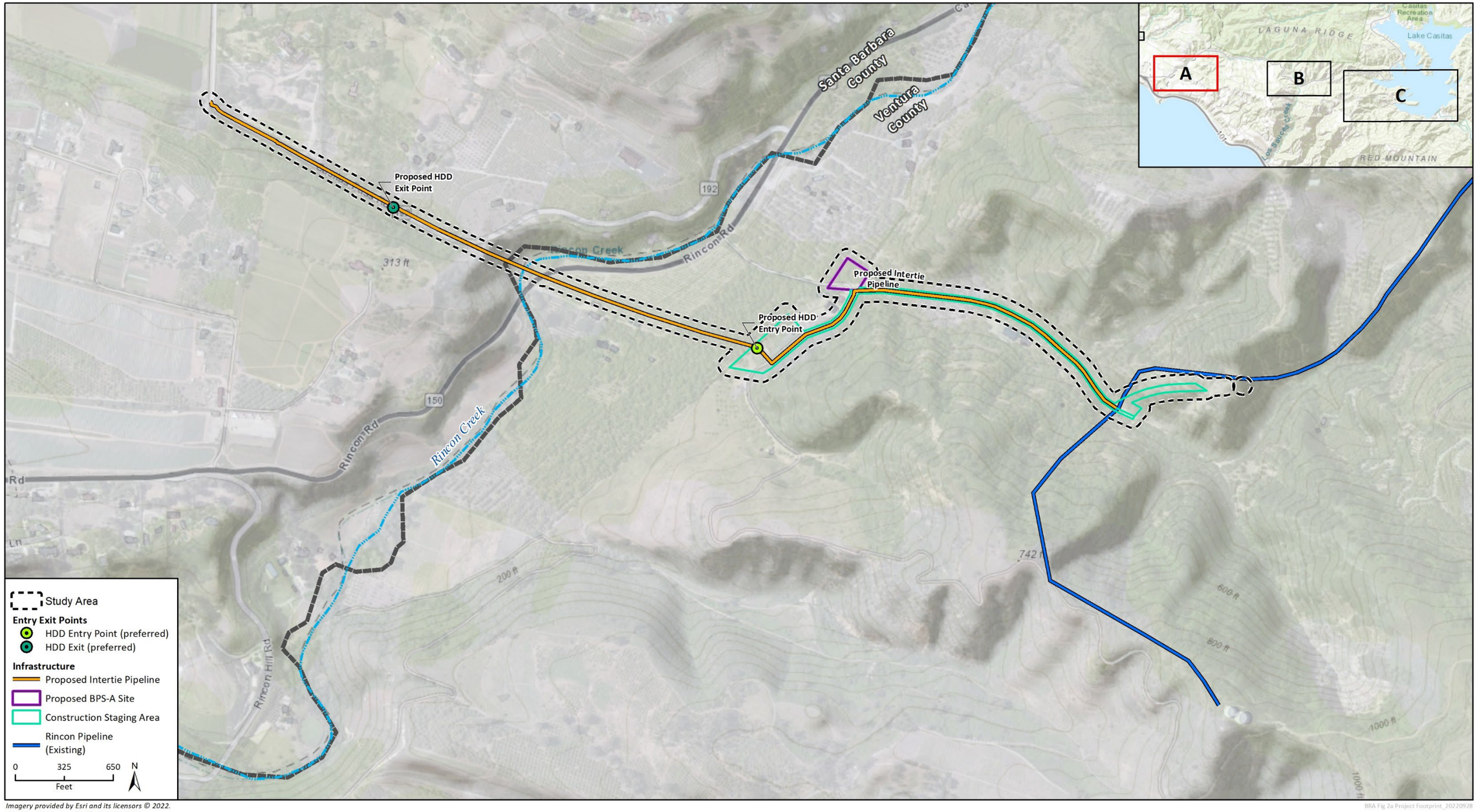
Fig 2 Project Overview - Revised 2022

Figure 3a Study Area



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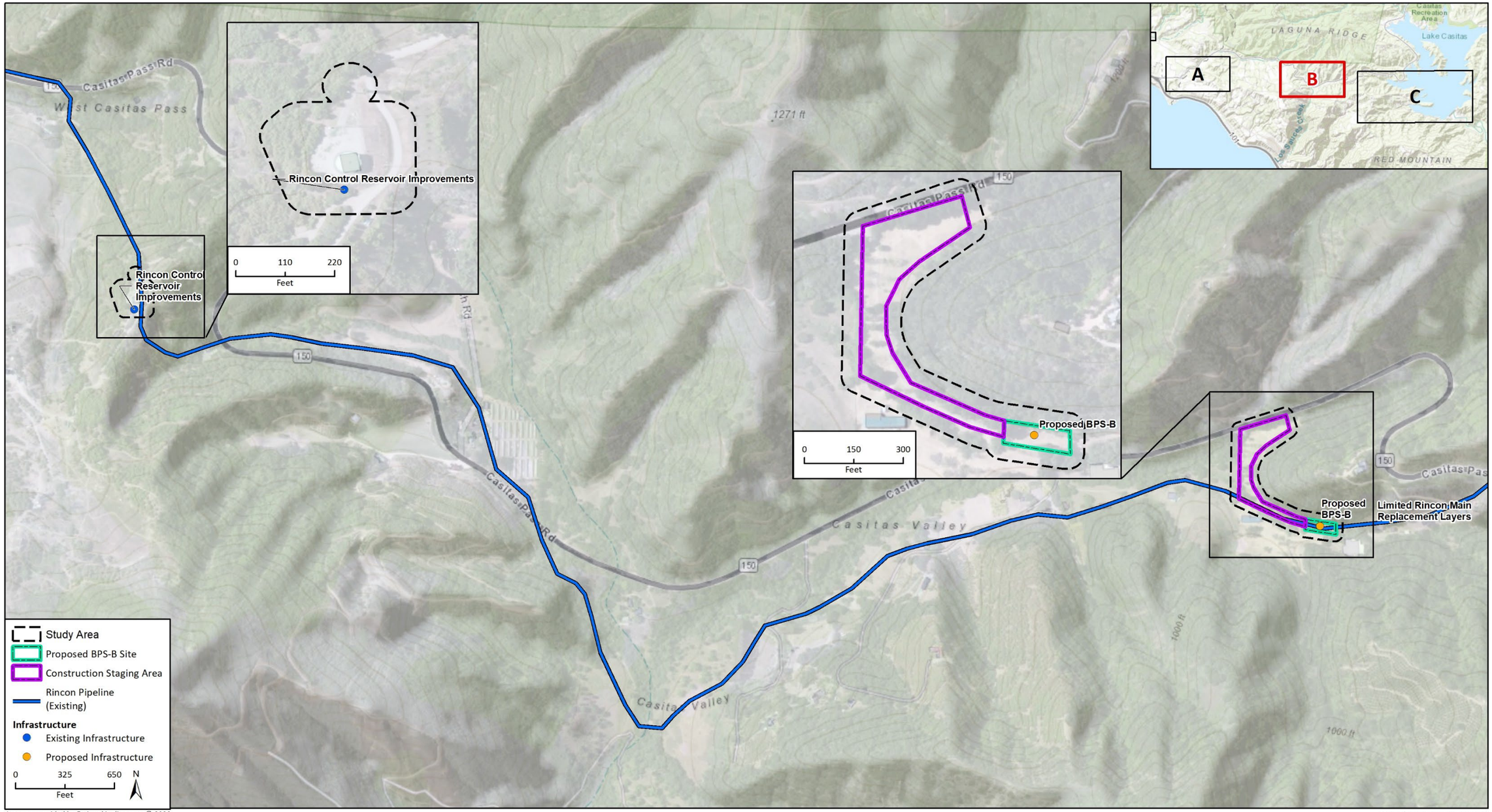
Additional data provided by CMWD 2022.

BRA Fig 2a Project Footprint_20220928

Figure 3b Study Area



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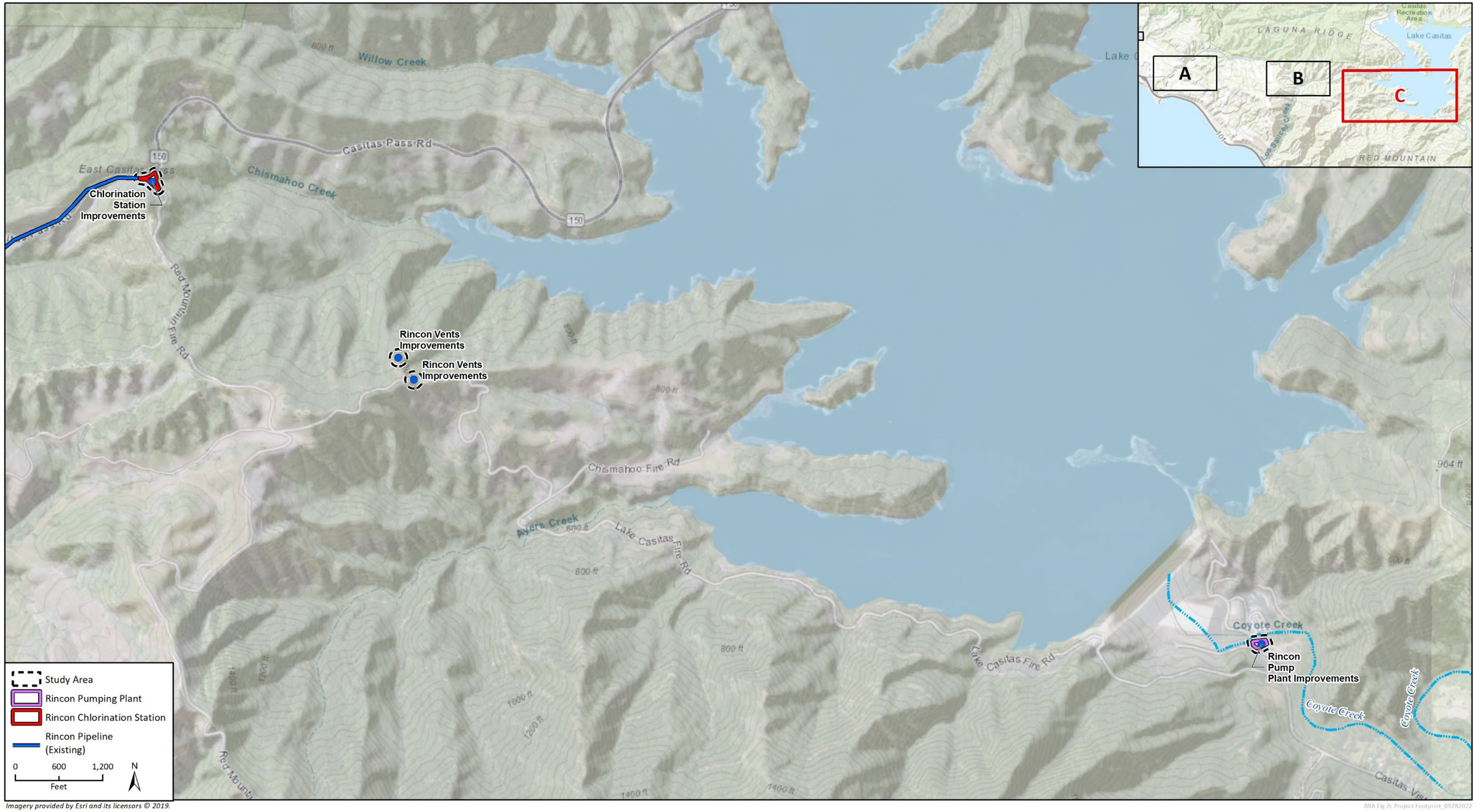
Additional data provided by CMWD 2022.

BRA Fig 2b Project Footprint_09282022

Figure 3c Study Area



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Additional data provided by CMWD 2019.

BRA Fig 2c Project Footprint_09282022

1.2.2 Project Objectives

The proposed project would facilitate the transfer of water between Casitas and CVWD, thereby improving regional water supply reliability. The project would allow Casitas and Santa Barbara County water purveyors to transfer local potable water supplies in either direction, as necessary, and improve the resiliency of the local water distribution network, including during natural disasters, such as wildfire, landslides, and earthquakes. In addition, the project would provide Casitas with a means of accessing its water allocations from the State Water Project to supplement existing supplies, resulting in a more resilient water supply portfolio. However, the proposed project would not increase the amount of water currently being supplied to existing customers or to provide water to areas currently not serviced by Casitas or CVWD.

1.2.3 Pipeline

Alignment

The proposed project would include between approximately 7,600 to 8,160 LF of 16-inch-diameter, underground potable water pipeline. Up to approximately 4,800 LF of the proposed pipeline would be constructed in unincorporated Ventura County; the remainder of the pipeline would be constructed in unincorporated Santa Barbara County. The western terminus of the pipeline would connect to the existing CVWD 15-inch pipeline at the southeastern corner of Lake Jocelyn, located immediately northwest of the southernmost portion of the segment of SR 192 in Santa Barbara County which traverses north-south. From Lake Jocelyn, the pipeline would traverse southeast along SR 192, cross underneath Rincon Creek and SR 150, and extend east to connect to the existing Rincon Pipeline approximately 0.5 mile east of Rincon Creek.

The crossing of Rincon Creek and SR 150 would be completed via underground horizontal directional drilling (HDD) construction. After crossing Rincon Creek and SR 150, the pipeline would continue southeast through an orchard for approximately 1,500 LF before turning north at Avocado Hill Road, a private unpaved access road. The pipeline would continue for approximately 800 LF through an area of the orchard developed with outbuildings, where it would connect with another private, unpaved access road. The pipeline would turn east at that access road and continue for 2,000 LF, where the intertie would connect to the existing Rincon Main Pipeline.

The project also includes the replacement of four portions of the existing Rincon Main Pipeline with insufficient capacity, referred to as Replacements 1a, 1b, 1c, and 2a. Replacements 1a, 1b, and 1c are located directly east of the future BPS-A site, within the existing orchard. Replacements 1a, 1b, and 1c would include the replacement of approximately 10 LF, 200 LF, and 100 LF of the Rincon Main Pipeline, respectively. Replacement 2a is located directly east of BPS-B and would include the replacement of approximately 210 LF of the Rincon Main Pipeline.

Construction

Materials required for pipeline construction include pipe; fittings and appurtenances; sand, cement slurry, and natural earth material for backfill; and paving materials. All materials would be delivered to the staging areas at the beginning of construction and materials needed for the day's work would be taken from the staging areas to the work site. The staging areas for pipeline construction would be at existing, previously disturbed areas near the proposed alignment or along the pipeline

alignment within paved roadways. It is estimated for each 1,000 LF of pipeline construction, five material deliveries per day would occur.

Proposed pipeline construction would primarily entail conventional, open-trench excavation within existing roadways. Open-trench excavation is a construction method typically utilized to install pipelines and their appurtenant structures, which include blow-offs, service meters, valves, and vaults. In general, the process of pipeline construction in a roadway would consist of site preparation, excavation and shoring, pipe installation and backfilling, and street restoration (where applicable). Pipeline construction using open-trench method requires the use of an excavator, wheeled loader, dump truck, and vibrating compactor.

The following is a description of the phases of construction for open-cut trenching:

- **Site Preparation.** The existing pavement along the pipeline alignment is cut with a concrete saw or otherwise broken and removed using jackhammers, pavement breakers, and loaders. Other similar equipment may be used. The pavement is removed from the project site and recycled or disposed of at an appropriate facility.
- **Excavation and Shoring.** A trench is excavated along the alignment using backhoes, excavators, or other types of excavation equipment. Portions of the trench adjacent to existing utilities may be manually excavated. Approximately 2,900 cubic yards of soil and pavement[1] would be hauled away and disposed of at an appropriate facility. The remainder of the excavated soil would be temporarily stored adjacent to the trenches or stored at staging areas to be used as trench backfill.

  The pipeline requires a minimum 30-inch width at its deepest location to a five-foot-wide trench at the surface in which to work and place the pipe. Trenches would generally be no more than six feet deep, unless there is a need to cross another utility or a trenchless-construction crossing requires a deeper, rectangular boring pit. If crossing another utility is required, the proposed trench depth depends on the depth of the existing utility and required clearance (generally, at least one foot) between the proposed pipeline and the existing utility line. Maximum trench depth would be approximately 10 feet in these areas.
- **Pipe Installation and Backfilling.** Once the trench is excavated and shored (if necessary), the pipe and backfill material are placed in the trench. Backfill material around pipeline includes sand bedding, imported aggregate material, or a sand-cement slurry. Such material is placed at least four inches under the pipe, six inches on each side, and one foot above the pipe. Generally, every linear foot of pipeline requires 0.11 cubic foot of sand (i.e., 1,000 feet of pipeline requires 110 cubic feet of sand). Assuming approximately two feet of cover over the sand backfill, required earth (soil) backfill is 0.22 cubic foot per linear foot of pipeline. The remaining one foot of trench backfill is comprised of paving materials (see Street Restoration below). At the end of each workday, the trench is covered with steel plates for public safety and so traffic can resume use of the roadway in both directions.
- **Street Restoration.** Final paving is performed once the entire pipeline segment is installed. Paving progresses at the rate of approximately 1,000 square feet per day. Paving requires a

[1] This approximated 2,900 cubic yards of soil and pavement is based on open-cut trenching for the proposed pipeline, which equate to approximately 4,400 LF of open-cut trenching (not including the segment of pipeline to be installed under Rincon Creek via trenchless crossing). It is estimated that approximately 0.65 cubic yard of soil and/or pavement would be hauled off-site for disposal (i.e., not used as trench backfill) per linear foot of pipeline installed (4,400 LF x 0.65 cubic yard per LF of open-cut trenching = 2,900 cubic yards of soil and/or pavement to be hauled off-site).

wheeled loader, paving machine, and roller. Once the pavement is restored, traffic delineation (striping) is also restored.

Typical open-cut pipeline construction, including trenching, installing the pipe, backfilling, and temporary plating, is accomplished at approximately 200 to 300 LF per day.

Creek Crossing

The crossing of Rincon Creek would occur using the trenchless HDD method. Trenchless HDD construction involves excavating an entrance pit on one side of the creek and a receiving pit on the opposite side of the creek. A pilot hole is drilled along the pipeline alignment, followed by the enlarging of the hole by passing a larger cutting tool (back reamer) through the hole. The pipe is then placed in the hole beneath the creek using a drill stem; the back reamer pulls the pipe into place behind it. HDD requires the use of drilling fluid (comprised of a mixture of water and bentonite or polymer) to remove cuttings, stabilize the bore hole, cool the cutting head, and lubricate the passage of the pipe. Used drilling fluid is collected in a reclaimer machine to remove drill cuttings and maintain the proper viscosity during reuse of the fluid. Upon completion of pipe installation, the entrance pit and receiving pit are backfilled and the disturbed land or habitat is restored. The project-specific SWPPP would include measures to avoid/minimize potential impacts to water quality from this method of creek crossing, including, but not limited to, ensuring the drilling fluid is properly contained and avoiding frac-outs.[2] Approximately 500 CY of spoils will be removed during HDD construction, based off a 30-inch borehole.

1.2.4 Booster Pump Stations

The proposed project also involves the construction and operation of two booster pump stations: BPS-A and BPS-B. BPS-A would consist of an approximately 2,000-square foot concrete masonry unit (CMU) block wall building including the following water treatment facilities to provide the required secondary disinfectant conversion from one district's source water to the other: (1) a mechanical room with four vertical turbine pumps (two duty, one standby, and one jockey pump); (2) 500-gallon ammonia (40 percent liquid ammonium sulfate) storage tank and two ammonia feed pump skids housed in dedicated ammonia room; (3) 2,500-gallon, 12.5 percent sodium hypochlorite vertical storage tank with secondary chemical containment housed in a dedicated sodium hypochlorite room; (4) two sodium hypochlorite feed pump skids housed in dedicated sodium hypochlorite room; (5) electrical room with the pump variable frequency drives and electrical panels; and (6) an outdoor, 3,000-gallon surge tank. In addition, a temporary booster pump station consisting of a packaged pump system containing eight pumps would potentially be installed at the BPS-A site to provide pumping capacity while the BPS-A permanent structure is being constructed. The temporary booster pump station would only be implemented if water is available and would operate for a maximum of one year. The temporary booster pump station, if constructed, would be hauled onto the site on a skid roller and minimal ground disturbance would be required. The temporary booster pump station would tie directly into the electrical grid and no generator would be required. Minor ground disturbance would be required to tie the temporary booster pump station into the water piping. BPS-A would be located in unincorporated Ventura County adjacent to

[2] HDD operations have a potential to release drilling fluids into the surface environment through frac-outs. A frac-out is the condition where drilling mud is released through fractured bedrock into the surrounding rock and sand and travels toward the surface. During the final design phase and upon close examination of geotechnical boring results and subsurface characteristics, the depth of the HDD is designed to achieve a minimum depth of cover to minimize the risk of a frac-out.

the pipeline alignment at the northwest intersection of Avocado Hill Road and an unpaved access road.

BPS-B would consist of an approximately 900-sf CMU block wall building housing three vertical turbine pumps (two duty and one standby pump) within a mechanical room. The building would also house the electrical room with the pump variable frequency drives and electrical panels. BPS-B would be located in unincorporated Ventura County on a previously disturbed area located approximately 740 feet south of SR 150, approximately 0.6 mile west of the intersection of SR 150 and Red Mountain Fire Road.

Each booster pump station would include an outdoor transformer, a meter/main switchboard, and space reserved for an emergency generator. Construction of the booster pump stations would include: site grading; underground and aboveground piping; concrete pads for pumps, piping, and electrical equipment; electrical service from Southern California Edison; installation of pumps, motors, and electrical equipment, including emergency generators; minor site improvements such as fencing and awnings over equipment; and start-up and testing. Typical construction equipment would include an excavator, grader, crane, and standard work trucks. Construction supplies and equipment would be staged at each pump station site.

1.2.5 Improvements to Existing Casitas Infrastructures

The proposed project would require miscellaneous infrastructure improvements at a number of existing Casitas facilities:

- Rincon Main Pipeline
- Rincon Control Reservoir
- Rincon Vents
- Chlorination Station
- Rincon Pump Plant

Rincon Main Pipeline

The proposed project would implement minor surge protection improvements at several existing air-relief valve locations along the existing Rincon Main Pipeline.

Rincon Control Reservoir

The Rincon Control Reservoir is an existing 250,000-gallon welded steel tank facility located between the proposed BPS-A and BPS-B along the Rincon Main Pipeline. Currently, the facility accommodates water flows from the Casitas system towards the CVWD system. The proposed project would modify the existing facility to allow for water flow in the reverse direction. Improvements would include new bypass piping and valve configuration, as well as electrical and communication system modifications.

Chlorination Station

The existing Chlorination Station is currently out of operation. The facility is located adjacent to an 18-inch shepherds hook vent. The project would replace the existing vent at the Chlorination Station site with a new equivalent combination air release valve to accommodate the proposed project. The project would not bring the Chlorination Station back online.

Rincon Vents

The Rincon Vents are existing vent structures for the Rincon Main Pipeline, located along the southern side of SR 150, approximately 4,940 feet west of Lake Casitas. To accommodate the proposed project, minor electrical and mechanical improvements would be made to the site. Two options for mechanical improvements are under consideration: either the existing vent structures would be replaced with combination air release valves or taller standpipe vents, or a new level indicating transmitter would be added to the existing vent structure stilling well and the northern vent would be raised by 10 feet.

Rincon Pump Plant

The Rincon Pump Plant is an existing pump facility located southeast of Lake Casitas and east of the Lake Casitas Dam. The proposed project would include installation of a new pressure sustaining and reducing valve, a check valve, isolation valves, and approximately 130 LF of 18-inch bypass pipeline at the Rincon Pump Plant.

2 Methodology

2.1 Regulatory Overview

Sensitive biological resources studied and analyzed herein include special status plant and animal species, nesting birds and raptors, sensitive native plant communities, jurisdictional waters and wetlands, wildlife movement, and locally protected resources, such as protected trees and locally designated environmentally sensitive habitat areas (ESHA). Sensitive biological resources are regulated by federal, state, and/or local authorities.

2.1.1 Environmental Statutes

For the purpose of this report, potential impacts to biological resources were analyzed based on the following (described in detail in Appendix A):

- CEQA
- Federal Endangered Species Act (FESA)
- California Endangered Species Act (CESA)
- Federal Clean Water Act (CWA)
- California Fish and Game Code (CFGC)
- Migratory Bird Treaty Act (MBTA)
- The Bald and Golden Eagle Protection Act
- Porter-Cologne Water Quality Control Act
- Ventura County General Plan Coastal Area Plan
- Ventura County Coastal Zoning Ordinance
- Santa Barbara County Article II Coastal Zoning Ordinance
- Santa Barbara County Comprehensive Plan
  - Coastal Land Use Plan
  - Conservation Element

2.2 Literature Review

Rincon staff reviewed a variety of literature sources to obtain baseline information about the biological resources with potential to occur within the project site and general vicinity. The literature review included, but not limited to, the following: Bowers et al. 2004; Holland 1986; Baldwin et al. 2012; Sawyer et al. 2009; Stebbins 2003; American Ornithologists Union 2019; and United States Army Corps of Engineers (USACE) 2008. Several documents from the Counties of Ventura and Santa Barbara were also reviewed including the Ventura County General Plan Coastal Area Plan, Ventura County Coastal Zoning Ordinance, Santa Barbara County Article II Coastal Zoning Ordinance, and the Santa Barbara County Comprehensive Plan.

Other sources of information about the project site included aerial photographs, topographic maps, geologic maps, climatic data, and project plans. Rincon also conducted queries of databases which provide information about occurrences of sensitive biological resources, including the CDFW

Biogeographic Information and Observation System and California Natural Diversity Data Base (CNDDB) (CDFW 2022a and 2022b); USFWS Critical Habitat Portal and Information, Planning, and Conservation System Query (USFWS 2022a and 2022b); United States National Wild and Scenic Rivers Program Map (United States National Wild and Scenic Rivers System 2022); National Wetlands Inventory (NWI) (USFWS 2022c); the United States Department of Agriculture, Natural Resource Conservation Service Web Soil Survey (USDA NRCS 2022); and the California Native Plant Society) Online Inventory of Rare and Endangered Plants of California (CNPS 2022. The queries included the *White Ledge Peak* California USGS 7.5-minute topographic quadrangle and the seven surrounding USGS quadrangles (*Hildreth Peak, Old Man Mountain, Wheeler Springs, Carpinteria, Matilija, Pitas Point, Ventura*)[3].

Rincon compiled a list of special status species previously documented within a five-mile radius by the CNDDB and/or CNPS within the 8-quadrangle search. Rincon then conducted an analysis to determine which species have the potential to occur within the proposed project footprint (i.e., areas which are expected to be affected by the proposed project) and a 50-foot survey buffer beyond the limits of the project footprint (Study Area) based on such factors as habitat suitability, previous disturbances, known geographic ranges, elevation, topography, vegetation, and soil substrate. Regionally occurring special status species were eliminated from consideration if the site lacked suitable habitat, or if elevation and/or geographic distribution were not consistent with species' known ranges. Special status species determined to have the potential to occur within the Study Area are discussed in Section 4.

2.3 Field Reconnaissance Survey

Rincon biologist Monica Jacinto conducted biological reconnaissance surveys on May 15 and June 12, 2019. The surveys were conducted between the hours of 0930 and 1500. Weather conditions consisted of cloudy skies with a temperature range of approximately 63 to 73 degrees Fahrenheit and winds approximately three to seven miles per hour. The biological reconnaissance survey encompassed the extent of the Study Area, with the exception of site BPS-B[4].

A second biological reconnaissance survey of the Study Area was conducted on July 14, 2022 by Rincon biologists Robin Murray and Lindsey Stockton. This survey was conducted to update the existing conditions within the Survey Area, and to evaluate additional project components not evaluated by the 2019 survey effort (i.e., site BPS-B). The survey was conducted between the hours of 0830 and 1230. Weather conditions consisted of clear skies with a temperature range of approximately 72 to 85 degrees Fahrenheit and winds approximately zero to three miles per hour.

The reconnaissance surveys consisted of the biologists driving and walking the extent of the Study Area, documenting general site conditions and habitats, recording the plants and animals observed (Appendix C), and documenting the limits of potentially jurisdictional waters and streambeds within the Study Area. For areas which were inaccessible within the Study Area (i.e., private property, unsafe steep hillsides), the biologist visually inspected those areas from the nearest vantage point with binoculars (10x42). The biologist identified wildlife species by direct observation, vocalization, or by sign (e.g., tracks, scat, and burrows). Rincon's biologists followed The Jepson Manual: Vascular Plants of California, second edition (Baldwin et al. 2012) for plant species nomenclature and

[3] An 8-quadrangle search was performed as a result of the Study Area in close proximity to the Pacific Ocean.

[4] Rincon Pipeline is an existing alignment which will not be altered as a result of this project and therefore was not surveyed during the biological reconnaissance surveys on May 15 and June 12, 2019.

taxonomy. The vegetation classification used for this analysis is based on (Sawyer et al. 2009), but it has been modified as needed based on species dominance to describe the existing vegetation communities in the Study Area.

3 Existing Conditions

This section summarizes the results of the biological reconnaissance surveys and provides further analysis of the data collected in the field. Discussions regarding the general environmental setting, vegetation communities, plant and wildlife species, special status species, and other biological resources are presented below. Representative photographs of the project site are provided in Appendix B and a complete list of the plant and wildlife species observed during the biological reconnaissance surveys is presented in Appendix C.

3.1 Physical Characteristics

The proposed project footprint traverses through Casitas Pass Road and Rincon Road between the Santa Ynez Mountains and the Pacific Ocean. The portion of the project within Santa Barbara County along Casitas Pass Road is surrounded by native vegetation consisting predominantly of coast live oak (*Quercus agrifolia*), purple sage (*Salvia leucophylla*), and California sycamore (*Platanus racemosa*), with scattered residential properties and agricultural land. The proposed project footprint within Ventura County that traverses Rincon Road is surrounded by predominantly agricultural land.

The weather in Ventura and Santa Barbara counties is typical of a Mediterranean climate. Summers are warm and dry while the winters are cool and often wet. Most precipitation occurs between November and March. The adjacency of the ocean to the Santa Ynez Mountains results in moist, ocean air masses being forced upward, and the resulting orographic effect increases precipitation along the South Coastal plain.

3.1.1 Watershed and Drainages

Within the Study Area, the following water features were identified: Rincon Creek, Casitas Creek, Coyote Creek, and an unnamed drainage tributary to Casitas Creek. Rincon Creek originates in the Santa Ynez Mountains, receives water from surrounding tributaries (e.g., Casitas Creek, Sulphur Creek, and Laguna Creek), and receives runoff water from neighboring agricultural lands. Rincon Creek traverses through foothills, the Study Area, and coastal terrace areas before reaching the Pacific Ocean. The NWI defines Rincon Creek as an intermittent channel where surface water is present for extended periods during late winter and early spring but is absent by the end of summer in most years.

Casitas Creek is situated directly north of the proposed BPS-B staging location. Casitas Creek originates in the Santa Ynez Mountains, receives runoff water from neighboring agricultural lands, and is a tributary to Rincon Creek. The NWI defines Casitas Creek as an intermittent channel.

The unnamed drainage tributary to Casitas Creek is situated south of the proposed BPS-B site. The drainage receives runoff water from neighboring natural and agricultural lands. This feature then turns to the north and flows to Casitas Creek, which then connects to Rincon Creek. The NWI defines this drainage as an ephemeral channel.

Coyote Creek is located directly north of where the Rincon Pumping Plant activities are proposed, south of Lake Casitas, and east of the Ventura River. The NWI defines Coyote Creek as an ephemeral channel where surface water is present for brief periods (from a few days to a few weeks) during

the growing season (winter to spring), but the water table usually lies well below the ground surface for most of the season.

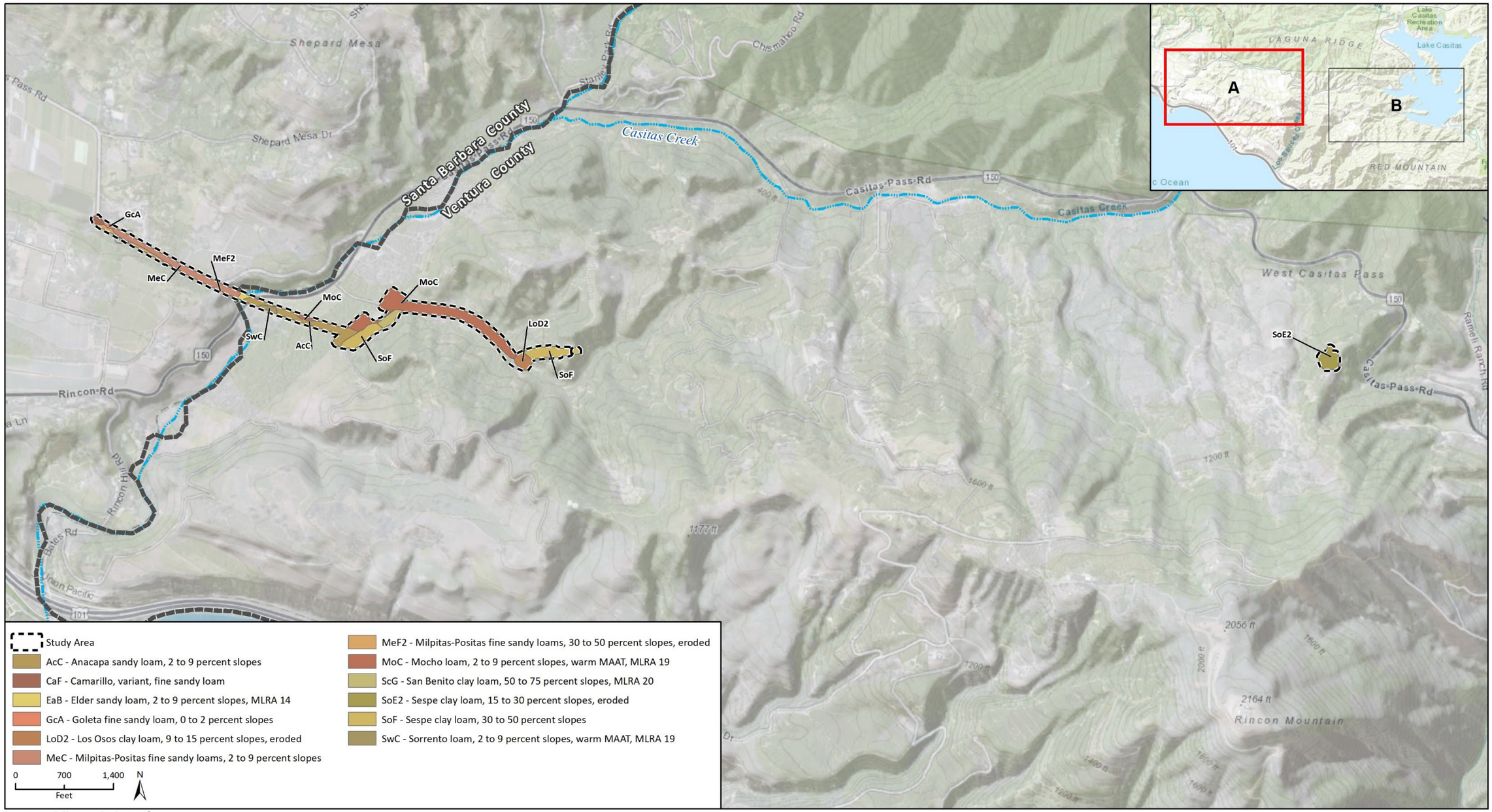
3.1.2 Soils

Certain soil types can support special status biological resources such as rare plants or indicate the potential presence of wetlands. Information about the soil types present within the Study Area was obtained from the NRCS Online Web Soil Survey (USDA NRCS 2022). Table 1 lists the soil type, elevation range, land form, and hydric soil rating for each soil type within the Study Area. A map illustrating soil locations is presented as Figure 4a and Figure 4b.

Table 1 Soil Types within the Study Area

Soil Type	Soil Chemistry	Elevation (feet)	Land Form	Hydric Soil Rating
MoC - Mocho loam, 2 to 9 percent slopes, warm MAAT, MLRA 19	Loam; well drained	10 to 2,240	Alluvial fans	No
Mec - Milpitas-Positas fine sandy loams, 2 to 9 percent slopes	Fine sandy loam, gravelly clay, very gravelly sandy loam; moderately well drained	30 to 800	Terraces	No
MeE2 - Milpitas-Positas fine sandy loams, 15 to 30 percent slopes, eroded	Fine sandy loam, clay, very gravelly sandy loam; moderately well drained	30 to 800	Terraces	Yes
AcC- Anacapa sandy loam, 2 to 9 percent slopes	Sandy loam, stratified coarse sandy loam to loam; well drained	0 to 1,440	Alluvial fans	No
CaF - Calleguas shaly loam, 30 to 50 percent slopes	very channery loam, bedrock; well drained	490 to 2,720	Mountain, hills	No
Cb - Camarillo, variant, fine sandy loam	Fine sandy loam, stratified loamy sand to clay loam, clay; poorly drained	10 to 50	Flood plains	Yes
ScG - San Benito clay loam, 50 to 75 percent slopes, MLRA 20	Clay loam, bedrock; well drained	60 to 2,650	Hills, mountains	No
GcA - Goleta fine sandy loam, 0 to 2 percent slopes	Fine sandy loam, loam, stratified loamy sand to clay loam; well drained	20 to 500	Valleys	No
LoD2 - Los Osos clay loam, 9 to 15 percent slopes, eroded	Clay loam, clay, bedrock; well drained	250 to 1,970	Hillslopes	No
MaF - Malibu loam, 30 to 50 percent slopes	Loam, clay, unweathered bedrock; well drained	100 to 2,500	Hills	No
SoE2 - Sespe clay loam, 15 to 30 percent slopes, eroded	Clay loam, weathered bedrock; well drained	400 to 2,600	Mountains	No
MeF2 - Milpitas-Positas fine sandy loams, 30 to 50 percent slopes, eroded	Fine sandy loam, clay, very gravelly sandy loam; moderately well drained	30 to 800	Terraces	No
SoF - Sespe clay loam, 30 to 50 percent slopes	Clay loam, weathered bedrock; well drained	400 to 2,600	Mountains	No
SoG - Sespe clay loam, 50 to 75 percent slopes	Clay loam, weathered bedrock; well drained	400 to 2,600	Mountains	No
SzC - Sorrento clay loam, heavy variant, 2 to 9 percent slopes	Clay loam; well drained	30 to 1,200	Alluvial fans	No
SwC - Sorrento loam, 2 to 9 percent slopes, warm MAAT, MLRA 19	Silty clay loam, sandy loam; well drained	0 to 1,340	Alluvial fans	No

Figure 4a Soils



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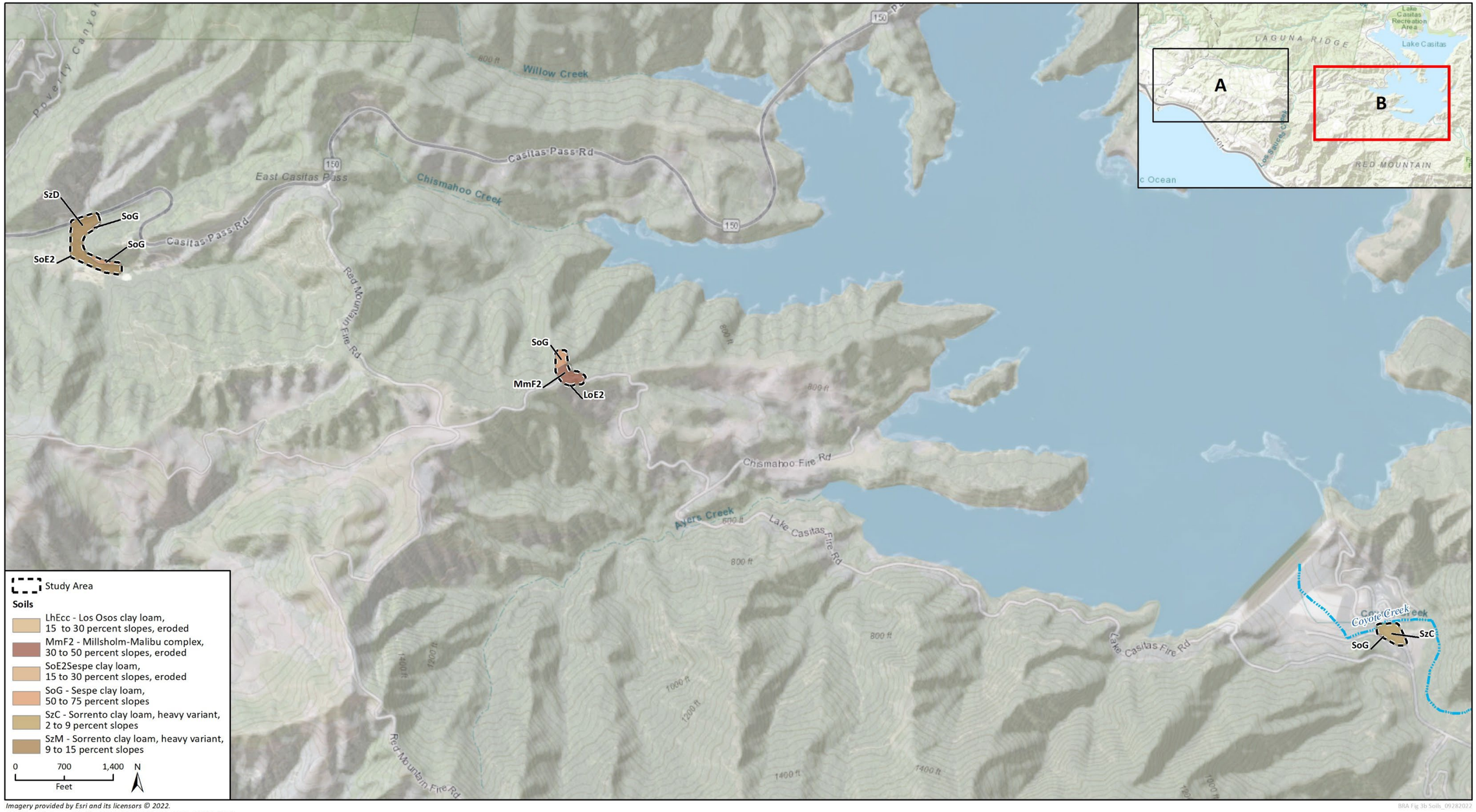
Additional data provided by USDA NRCS SSURGO, 2022. CMWD 2019.

BRA Fig 3a Soils_20220928

Figure 4b Soils



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Additional data provided by USDA NRCS SSURGO, 2022. CMWD 2019.

BRA Fig 3b Soils_09282022

3.2 Vegetation and Other Land Cover

Vegetation communities and land cover types documented within the Study Area during the biological reconnaissance surveys are listed in Table 2 and described in detail further below. These general vegetation/land cover types can be further categorized across vegetation alliances as described in *A Manual of California Vegetation, Second Edition* (Sawyer et al. 2009). A map illustrating terrestrial vegetation communities and land cover types is presented as Figure 5 through Figure 5c.

Table 2 Summary of Vegetation and Land Cover Types within the Study Area

Habitat Type	Approximate Acreage	Approximate Percent Area
Agricultural/Developed/Landscaped	25.6	65.6%
Coast Live Oak Woodland	7.02	18.0%
California Sycamore Woodland	2.93	7.5%
Wild Oat Grassland	1.31	3.4%
Bigpod Ceanothus Chaparral	1.68	4.3%
Purple Sage Scrub	0.34	0.9%
Poison Oak Scrub	0.16	0.4%
Total	**39.04**	**100%**

Agricultural/Developed/Landscaped

The dominant land cover type throughout the Study Area is characterized as agricultural/developed/landscaped. These areas consist of agricultural land, residential development and other infrastructures, paved or graded dirt areas with little to no vegetation, or planted ornamental landscape species. The proposed pipeline alignment occurs along the paved roadways associated with Casitas Pass Road and Rincon Road and graded dirt roadways associated with agricultural land. Sections along the proposed alignment consist of landscaped and ruderal vegetation species such as mature pine trees (*Pinus* sp.), Peruvian pepper trees (*Schinus molle*), Russian thistle (*Salsola tragus*), mustards (*Brassica* spp.), castor bean (*Ricinus communis*), Aloe species typically used in landscaping, and ornamental trees such as non-native palm trees.

Coast Live Oak Woodland

The *Quercus agrifolia* Woodland Alliance is dominated by coast live oak, which is a native evergreen, wide-topped tree with furrowed, dark-gray bark. These oak trees can reach 70 feet tall forming continuous, intermittent, or open canopies with occasional or common understory shrubs and an absent or grassy ground layer. Coast live oak woodland often occurs on alluvial terraces, canyon bottoms, stream banks, slopes, and flats. Important tree canopy associates of coast live oak woodland within the Study Area include California sycamore. Native shrubs observed growing below the oak tree canopy include toyon (*Heteromeles arbutifolia*) and coastal sage brush (*Artemisia californica*). This alliance was observed throughout most of the Study Area.

California Sycamore Woodland

In the *Platanus racemosa* Woodland Alliance, California sycamore is dominant or co-dominant in the tree canopy with important associate species such southern California black walnut (*Juglans*

californica), coast live oak, Fremont cottonwood (*Populus fremontii*), and arroyo willow (*Salix lasiolepis*) in the shrub layer. This alliance typically inhabits gullies, intermittent streams, springs, seeps, stream banks, and terraces adjacent to floodplains subject to high-intensity flooding. Within the Study Area, this alliance is associated with Rincon Creek, Casitas Creek, and the unnamed drainage tributary to Casitas Creek. Within these areas, arroyo willow is co-dominant.

Wild Oats Grasslands

The *Avena* (*barbata*, *fatua*) Herbaceous Semi-Natural Alliance is dominated or co-dominated by slim oat (*Avena barbata*) and wild oats (*Avena fatua*) in the herbaceous layer. This alliance typically inhabits waste places, rangelands, and openings in woodlands with elevations ranging from 32 to 3,900 feet. This alliance was observed within the proposed BPS-B site and its associated construction staging area.

Eucalyptus Groves

In the *Eucalyptus* spp. Woodland Semi-Natural Alliance, eucalyptus tree species are dominant in the tree canopy. This alliance is typically found in uplands, bottomlands, and adjacent to stream courses, lakes, or levees. Furthermore, this alliance is planted as trees, groves, and windbreaks. Its elevation range is 0 to 6,200 feet. This alliance was observed along Casitas Pass Road and adjacent to the Balancing Reservoir, and is dominated by blue gum eucalyptus (*Eucalyptus globulus*). A shrub layer is typically absent within this community.

Bigpod Ceanothus Chaparral

In the *Ceanothus megacarpus* Shrubland Alliance, bigpod ceanothus (*Ceanothus megacarpus)* is the dominant species in the shrub canopy with redbud (*Rhamnus crocea*), poison oak, and coyote brush (*Baccharis pilularis*) present as subdominant species. Emergent trees may be present at low cover, including the California walnut tree. This alliance is typically found with intermittent canopy and an occasionally grassy herbaceous layer. This vegetation community type is present north of the proposed BPS-B site and Rincon Vents Improvements.

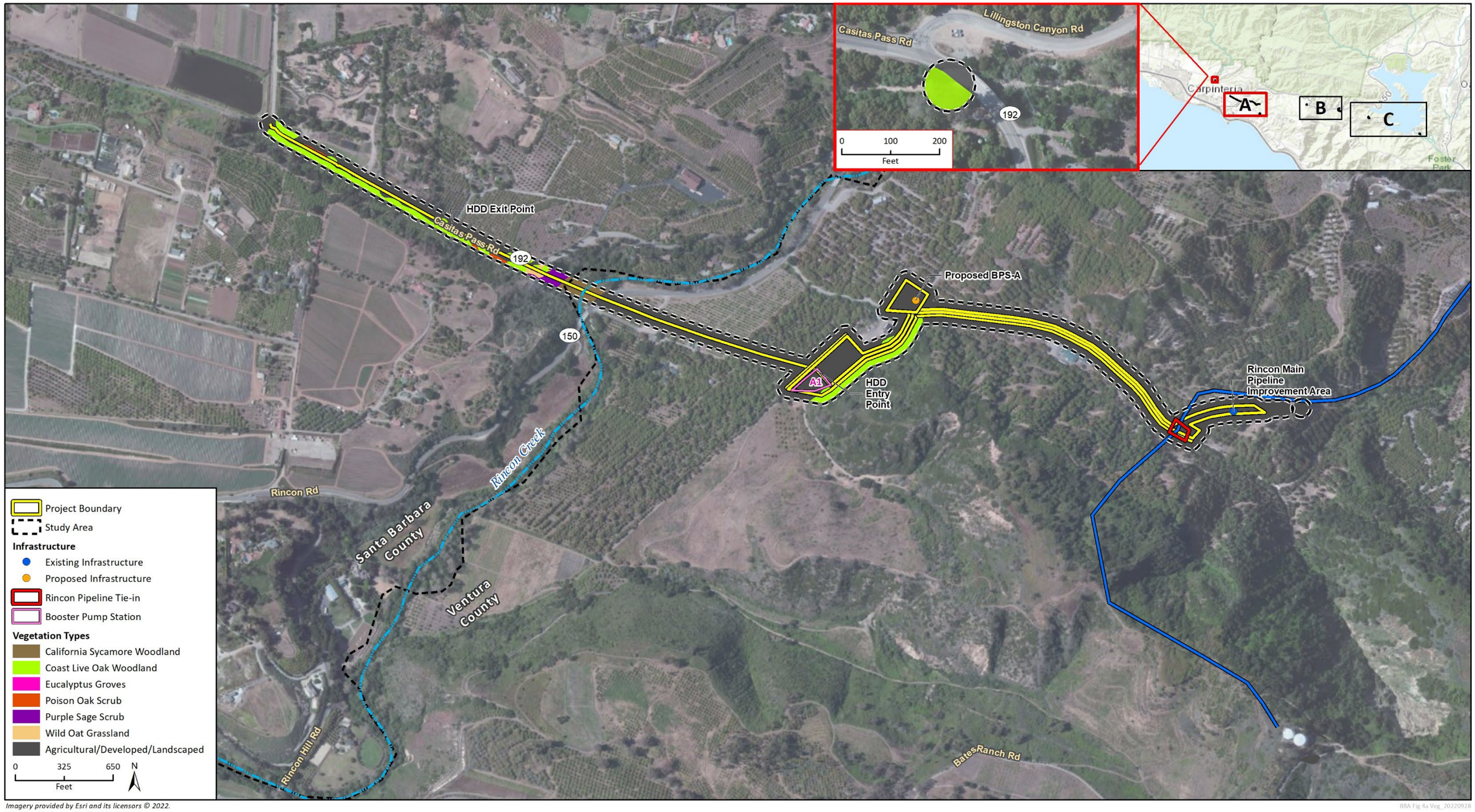
Purple Sage Scrub

In the *Salvia leucophylla* Shrubland Alliance, purple sage is the dominant or co-dominant species in the shrub canopy with important associate species such as coastal sage brush, and emergent coast live oak. This alliance is typically found along slopes of variable aspect, but usually steep with elevations ranging from 500 to 9,800 feet. This alliance was observed along the hillside between Casitas Pass Road and Rincon Road where HDD activities are proposed, as well as on the hillside east of the Rincon Vents Improvements.

Poison Oak Scrub

The *Toxicodendron diversilobum* Shrubland Alliance is dominated by poison oak in the shrub canopy with important associate species such as coastal sage brush, coyote brush (*Baccharis pilularis*), sticky monkeyflower (*Diplacus aurantiacus*), laurel sumac (*Malosma laurina*), and coast live oak. This alliance is typically found on the immediate coast in mesic hollows receiving salt-laden fog to interior sheltered mesic and disturbed dry slopes. Within the Study Area, this alliance was observed in openings within coast live oak woodland along Casitas Pass Road.

Figure 5a Vegetation Communities and Other Land Cover Types



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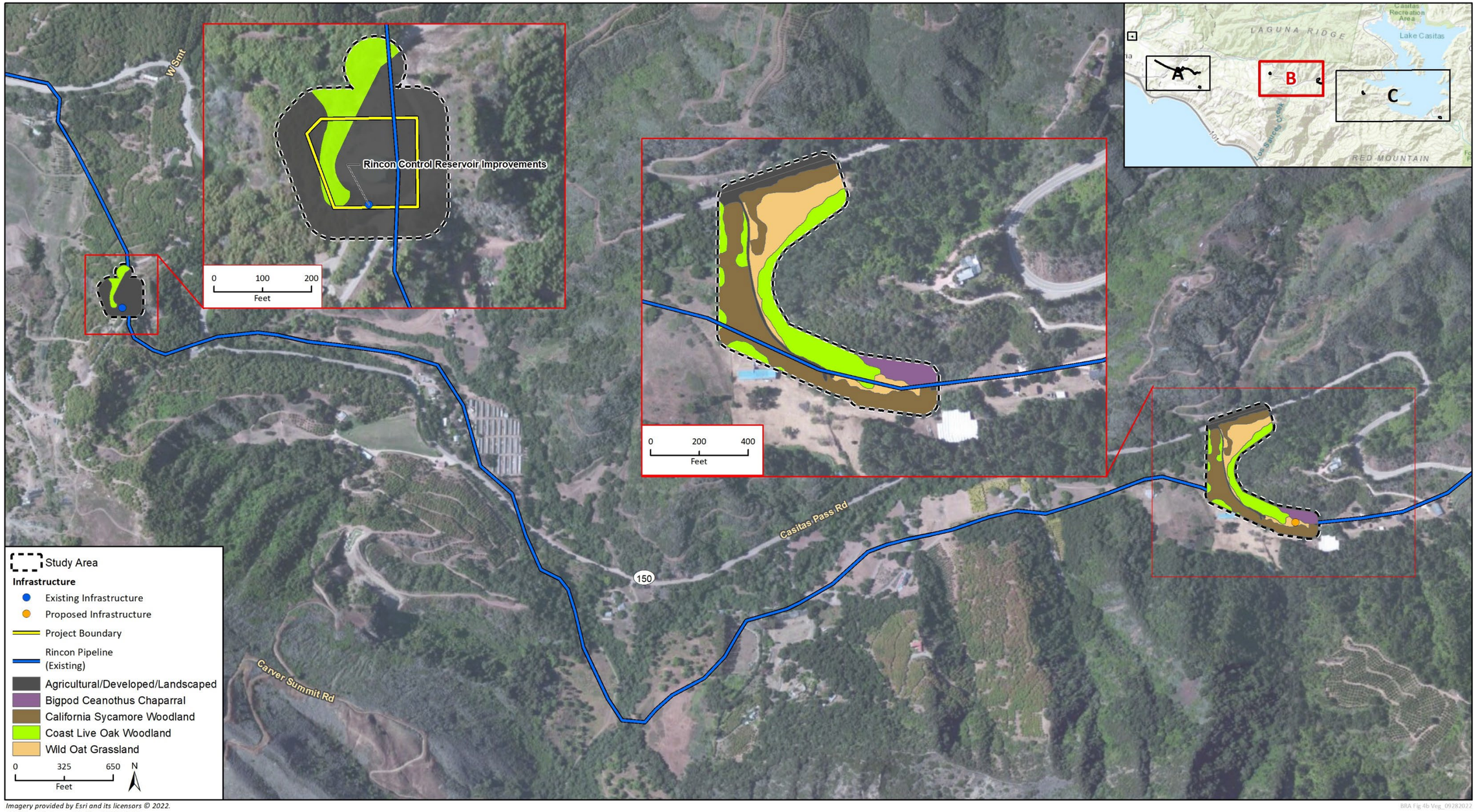
Additional data provided by CMWD 2022.

BRA Fig 4a Veg_20220928

Figure 5b Vegetation Communities and Other Land Cover Types



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Additional data provided by CMWD 2022.

BRA Fig 4b Veg_09282022

Figure 5c Vegetation Communities and Other Land Cover Types

Imagery provided by Esri and its licensors © 2022.
Additional data provided by CMWD 2022.

BRA Fig 4c Veg

3.3 General Wildlife

The Study Area contains suitable habitat for various common wildlife species which occur in southern California. Wildlife observed within the Study Area include bird species such as California quail (*Callipepla californica*), California towhee (*Melozone crissalis*), California scrub-jay (*Aphelocoma californica*), house finch (*Haemorhous mexicanus*), and red-shouldered hawk (*Buteo lineatus*). Wildlife not observed, but likely to occur include (but not limited to) Virginia opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), red-tailed hawk (*Buteo jamaicensis*), and a variety of other song bird, mammalian, and reptilian species. The vegetation throughout the Study Area contains suitable nesting habitat for songbirds and raptors.

A complete list of the plant and wildlife species observed within the Study Area during the biological reconnaissance surveys is provided in Appendix C.

4 Sensitive Biological Resources

Local, state, and federal agencies regulate special status species and other sensitive biological resources. For the purpose of this analysis, sensitive resources include special status plant and animal species, sensitive vegetation communities, potentially jurisdictional streams and wetlands, wildlife corridors, locally protected resources such as native trees, and areas of special designation such as ESHA.

This section discusses the presence of, or potential for sensitive biological resources to occur within the Study Area. The designation of "potential to occur" is based on the presence or absence of suitable habitat for each special status species known to occur in the region and the quality of such habitat, based on a variety of species-specific criteria.

4.1 Special Status Species

Assessments for the potential occurrence of special status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDB, species occurrence records from other sites near the Study Area, and the results of the biological reconnaissance surveys for the project. As discussed in Section 2.2, an analysis was conducted to determine which of the regionally occurring special status species have potential to occur within the Study Area (Appendix D). The potential for each special status species to occur in the Study Area was evaluated according to the following criteria:

- **Not Expected.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime), and species would have been identifiable on-site if present (e.g., oak trees). Protocol surveys (if conducted) did not detect species.
- **Low Potential.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site. Protocol surveys (if conducted) did not detect species.
- **Moderate Potential**. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present.** Species is observed on the site or has been recorded (e.g., CNDDB, other reports) on the site recently (within the last 5 years).

Plant or animal taxa may have "special status" due to declining populations, vulnerability to habitat change, or because they have restricted ranges. Some are listed as threatened or endangered by the USFWS or by the CDFW and are protected by the FESA and CESA. Others have been identified as sensitive or as special status species by the USFWS, the CDFW, or by private conservation organizations, including the CNPS. Unlisted special status species do not have formal State or federal status.

For the purpose of this BRA, special status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS under the FESA; those listed or candidates for listing as Rare, Threatened, or Endangered by the CDFW under the CESA or Native Plant Protection Act; those recognized as Species of Special Concern (SSC) by the CDFW; and plants ranked as 1 or 2 by the CNPS California Rare Plant Rank (CRPR) system, per the following definitions:

- **Rank 1A** = Plants presumed extinct in California
- **Rank 1B.1** = Rare or endangered in California and elsewhere; seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
- **Rank 1B.2** = Rare or endangered in California and elsewhere; fairly endangered in California (20 to 80 percent occurrences threatened)
- **Rank 1B.3** = Rare or endangered in California and elsewhere, not very endangered in California (less than 20 percent of occurrences threatened or no current threats known)
- **Rank 2** = Rare, threatened, or endangered in California, but more common elsewhere

In addition, special status species are ranked globally (G) and subnationally (S) 1 through 3 based on NatureServe's (2010) methodologies:

- **G1 or S1** - Critically Imperiled Globally or State-wide
- **G2 or S2** - Imperiled Globally or State-wide
- **G3 or S3** - Vulnerable to extirpation or extinction Globally or State-wide

Plant communities are also considered special-status biological resources if they have limited distributions, have high value for sensitive wildlife, contain special-status species, or are particularly susceptible to disturbance. The current CDFW Sensitive Natural Communities List (CDFW 2022a) was referenced to determine the current sensitivity status of the vegetation alliances found within the Study Area. The list provides the current G and S rank for each community and indicates whether CDFW considers the community to be sensitive. In addition, the Counties of Ventura and Santa Barbara consider certain habitats to be of significant ecological and biological value (i.e., ESHA).

4.1.1 Special Status Plant Species

Rincon identified 30 special status plant species previously documented within a five-mile radius by the CNDDB and/or CNPS within the 8-quadrangle search. Of the 30 species evaluated, six special status plant species have a low potential to occur within the coast live oak woodland, foothill grassland, coastal scrub, and riparian corridors throughout the Study Area:

- Santa Barbara honeysuckle (*Lonicera subspicata* var*. subspicata*); CRPR 1B.2
- Davidson's bush-mallow (*Malacothamnus davidsonii*); CRPR 1B.2
- White-veined monardella (*Monardella hypoleuca* ssp*. hypoleuca*); CRPR 1B.3
- Ojai navarretia (*Navarretia ojaiensis*); CRPR 1B.1
- Nuttall's scrub oak (*Quercus dumosa*); CRPR 1B.1
- Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*); CRPR 2B.2

The remaining 24 special status plant species are not expected to occur at the Study Area based on a lack of suitable habitat. Habitat characteristics factored into this determination included the

disturbance history of the site, lack of suitable soils, elevation of the site, inappropriate hydrologic conditions, and absence of appropriate vegetation communities.

4.1.2 Special Status Wildlife Species

Based on the database and literature review, 26 special-status wildlife species have been recorded within a five-mile radius of the project site (Appendix B). Of the 26 species evaluated, nine have a low potential to occur, two have a moderate potential, and one has a high potential to occur (Table 3). The remaining 14 special status animal species are not expected to occur based on unsuitable habitat conditions (e.g., disturbance history of the site, unsuitable soils, elevation, inappropriate hydrologic conditions, and absence of appropriate vegetation communities). This includes some bird and bat species previously documented near the Study Area, but likely to be only transient through the area during limited foraging or migratory movements, and for which no suitable nesting or roosting habitat is present. The species which can be reasonably anticipated to occur were determined based on the published ranges of the species, and the type, extent, and condition of habitat available at the site. No special status wildlife species were observed within the Study Area during the survey efforts.

Special status or other protected species with a low, moderate or high potential to occur within or adjacent to the Study Area are discussed further below.

Table 3 Special Status Wildlife Species with Potential to Occur Within the Study Area

Species	Low	Moderate	High
Crotch bumblebee (*Bombus crotchii*); SC	X		
Monarch butterfly - California overwintering population (*Danaus plexippus* pop. 1); FC	X		
California red-legged frog (*Rana draytonii*); FT, SSC	X		
coast range newt (*Taricha torosa*); SSC	X		
California legless lizard (*Anniella pulchra*); SSC		X	
western pond turtle (*Emys marmorata*); SSC	X		
two striped garter snake (*Thamnophis hammondii*); SSC	X		
southwestern willow flycatcher (*Empidonax traillii extimus*); FE, SE	X		
yellow warbler (*Setophaga petechia*); SSC			X
least Bell's vireo (*Vireo bellii pusillus*); FE, SE	X		
San Diego desert woodrat (*Neotoma lepida intermedia*); SSC		X	
American badger (*Taxidea taxus*); SSC	X		

FC = Federal Candidate, FE = Federally Endangered, FT = Federally Threatened, SC = State Candidate, SE = State Endangered, SSC = CDFW Species of Special Concern

- **Monarch butterfly** California overwintering population has a low potential to occur within the Study Area. This species roosts in dense stands of wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and fresh water sources nearby. Eucalyptus groves were observed sporadically throughout the Study Area; however, these groves consist of narrow linear features that provide limited shelter from wind and are expected to provide only marginally suitable habitat for monarch roosting, due to their limited ability to provide shelter from wind. Suitable nectar plants for monarch foraging are present throughout the Study Area but are limited in developed and agricultural areas.

- **California red-legged frog** has a low potential to occur within the Study Area. The species inhabits lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation. Additionally, it requires between 11 and 20 weeks of permanent water for larval development. Riparian vegetation within the creeks throughout Study Area was observed during the field efforts; however, emergent vegetation and the aquatic conditions needed to support the species' life cycle (e.g., permanent water) were absent. The closest CNDDB records to the Study Area are greater than three miles away, associated with Santa Monica Creek and Arroyo Paredon. These recorded occurrences are from 2005 and 2008.
- **Coast range newt** has a low potential to occur within the Study Area. The species inhabits coastal drainages from Mendocino County to San Diego County. It occupies terrestrial habitats and will migrate over half a mile to breed in ponds, reservoirs, and slow-moving streams. Marginally suitable upland habitat is present along the creeks throughout the Study Area. The closest known CNDDB record to the Study Area is greater than four miles away, associated with Coyote Creek and north of Lake Casitas.
- **California legless lizard** has a moderate potential to occur within the Study Area. The species inhabits sandy or loose loamy soils under sparse vegetation. Soil moisture is essential for this species. Suitable habitat is present along the creeks throughout the Study Area.
- **Western pond turtle** has a low potential to occur within the Study Area. This species is a thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6,000 feet elevation. The species requires basking sites and suitable upland habitat (sandy banks or grassy open fields) up to 0.25 of a mile from water for egg-laying. Elements of suitable habitat are present along the creeks throughout the Study Area. However, necessary aquatic conditions (permanent surface water) to support the species are absent.
- **Southwestern willow flycatcher** has a low potential to occur within the Study Area. This species inhabits riparian habitats in southern California and requires dense riparian habitat for nesting. Riparian habitat is present within the creeks throughout the Study Area and is suitable for foraging; however, the riparian habitat lacks the density and vertical complexity preferred by this species.
- **Yellow warbler** has a high potential to occur within the Study Area. Yellow warblers are frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders (Rodewald 2015). Suitable foraging and nesting habitat was observed within the riparian habitat associated with Rincon Creek where HDD activities are proposed. Suitable foraging and nesting habitat was also observed within the riparian habitat directly adjacent to where BPS-B is proposed. Additionally, there are two CNDDB observation records from 2015 within Casitas Creek in the Study Area.
- **Least Bell's vireo** has a low potential to occur within the Study Area. This species is a summer resident of southern California in riparian areas in the vicinity of water or in dry or perennially wet river bottoms; below 2,000 feet. Its nests are placed along margins of bushes, in willow trees or on twigs projecting into pathways, usually willow species. Riparian habitat is present within the creeks throughout the Study Area and is suitable for foraging; however, the riparian habitat lacks the density preferred by this species. Furthermore, the species is more closely associated with the Santa Ynez River in Santa Barbara County, which is greater than nine miles northwest of the Study Area.

- **San Diego desert woodrat** has a moderate potential to occur within the Study Area. This species inhabits coastal scrub of southern California from San Diego County to San Luis Obispo County. The species prefers moderate to dense canopies and are particularly abundant in rock outcrops, rocky cliffs, and slopes. Suitable habitat is present within coast live oak woodlands and scrub habitat within the Study Area; however, no woodrat middens were observed during the surveys.
- **American badger** utilizes a wide variety of scrub, forest and grassland habitats with friable soils. The portions of the Study Area provides suitable habitat for this species. American badgers can forage throughout the Study and areas suitable for den construction include the more open habitat types such as the ruderal/non-native grassland, openings in the shrubland habitats as well as in the banks of the existing main drainage. No American badgers or their sign were detected within the Study Area and to the high human presence and surrounding landscaped and disturbed land cover, this species has low potential to occur.

4.1.3 Nesting Birds

The Study Area contains habitat which can support nesting birds, including raptors, protected under the CFGC Section 3503 and the MBTA (16 United States Code §§ 703–712). Potential nesting locations were observed throughout the Study Area. Suitable habitat for raptors includes native and non-native mature trees (e.g., coast live oak, California sycamore, eucalyptus, pine, and palms). Trees, shrubs, and ground vegetation all provide suitable nesting habitat for a variety of passerine species.

4.2 Sensitive Plant Communities and Critical Habitats

The sensitive vegetation community California sycamore woodland (G3S3) was documented within the Study Area within Rincon Creek, Casitas Creek, Coyote Creek, and within portions of the proposed BPS-B site and staging area. Coast live oak woodland within the Coastal Zone is considered ESHA.

The proposed project does not occur within any federally designated critical habitat. Therefore, critical habitat is not addressed further within this analysis.

4.3 Jurisdictional Waters and Wetlands

Areas potentially subject to the jurisdiction of the USACE pursuant to Section 404 of the CWA, the jurisdiction of the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the CWA and the California Water Code (Porter-Cologne Water Quality Control Act), and the jurisdiction of the CDFW pursuant to California Fish and Game Code 1600, were assessed during the literature review and biological reconnaissance surveys. Results of the research and field surveys determined the following four potentially jurisdictional features occur within the Study Area: Rincon Creek, Casitas Creek, Coyote Creek, and an unnamed drainage tributary to Casitas Creek (Figure 6a through Figure 6c). A formal jurisdictional delineation was not conducted for this analysis, and the results presented here are preliminary of those areas likely to be considered jurisdictional by the various resource agencies.

Rincon Creek, which crosses a portion of the proposed infrastructure and runs along the Santa Barbara and Ventura County Line, is an intermittent channel connecting to the Pacific Ocean. It has a bed, bank, channel, associated riparian habitat, and a connection with a traditional navigable

water (TNW), that is, the Pacific Ocean. As such, it is likely subject to jurisdiction of the USACE, RWQCB, CDFW, and Counties of Ventura and Santa Barbara.[5]

Casitas Creek is located north of the BPS-B construction staging area and receives runoff water from first-order streams and neighboring agricultural and natural lands, has a bed and bank, associated riparian habitat, and is a tributary to Rincon Creek. Therefore, Casitas Creek is likely subject to USACE, RWQCB, and CDFW jurisdiction.

Coyote Creek is located directly north of where the Rincon Pumping Plant activities are proposed, south of Lake Casitas, and is a tributary to the Ventura River. Coyote Creek has a bed and bank, associated riparian habitat, and a connection with the Pacific Ocean through the Ventura River. As such, Coyote Creek is likely subject to USACE, RWQCB, and CDFW jurisdiction.

The unnamed drainage south of the proposed BPS-B site receives runoff water from neighboring agricultural lands and natural areas. This feature then turns to the north and flows to Casitas Creek, which then connects to Rincon Creek. As the unnamed drainage is a tributary to Casitas Creek it is likely subject to USACE, RWQCB, and CDFW jurisdiction.

4.4 Wildlife Movement

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches allowing for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

Habitats present within a linkage do not necessarily need to be the same as the habitats being linked. Rather, the linkage only needs to contain sufficient cover and forage to allow temporary habitation by ground-dwelling species while moving between core habitat areas. Typically, habitat linkages are contiguous strips of natural areas. Dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Depending upon the species using a corridor, specific physical resources (e.g., rock outcroppings, vernal pools, or oak trees) may need to be in the habitat link at certain intervals to allow slower-moving species to traverse the link. For highly mobile or aerial species, habitat linkages may be discontinuous patches of suitable resources spaced sufficiently close together to permit travel along a route in a short period of time.

The Study Area is not within any mapped Essential Connectivity Area or Natural Landscape block as designated by the California Essential Habitat Connectivity Project (Spencer et al. 2010), and is not situated within Ventura County's Habitat Connectivity and Wildlife Corridor map. Habitat corridors present within the Study Area include the creeks, drainages and other topographic features facilitating local wildlife movement, such as Rincon Creek, Casitas Creek, and Coyote Creek. The Santa Ynez Mountains constitute a large, regional block of habitat to the north of the Study Area. Due to rural expansion, connectivity between the mountains and the project is semi restricted, but accessible through the riverine habitat of Rincon Creek and Casitas Creek. As such, portions of the Study Area likely overlap areas which support wildlife movement for a range of common species

[5] Rincon Creek is within the coastal zone in Ventura and Santa Barbara counties.

Figure 6a Potentially Jurisdictional Aquatic Resources

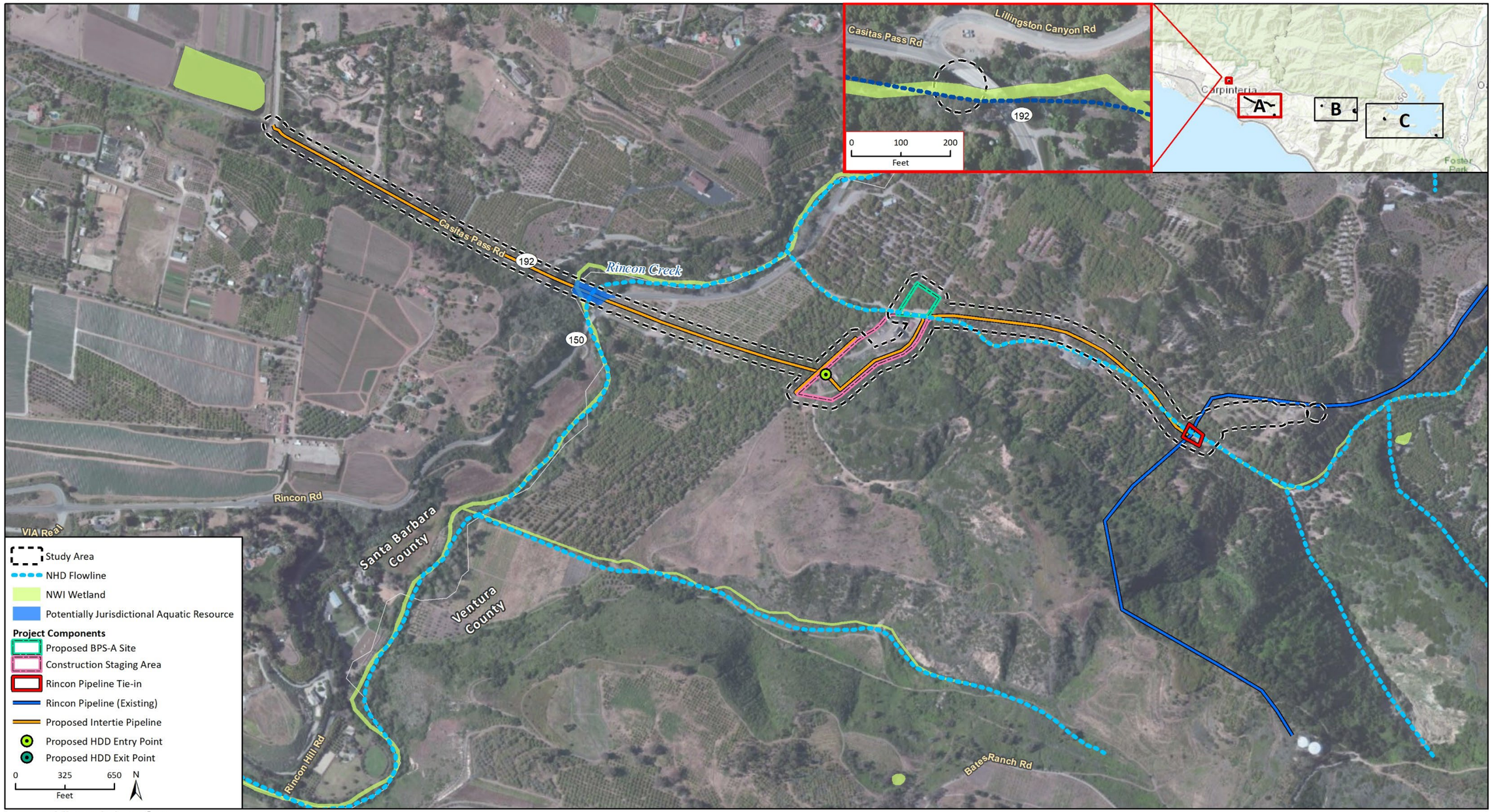
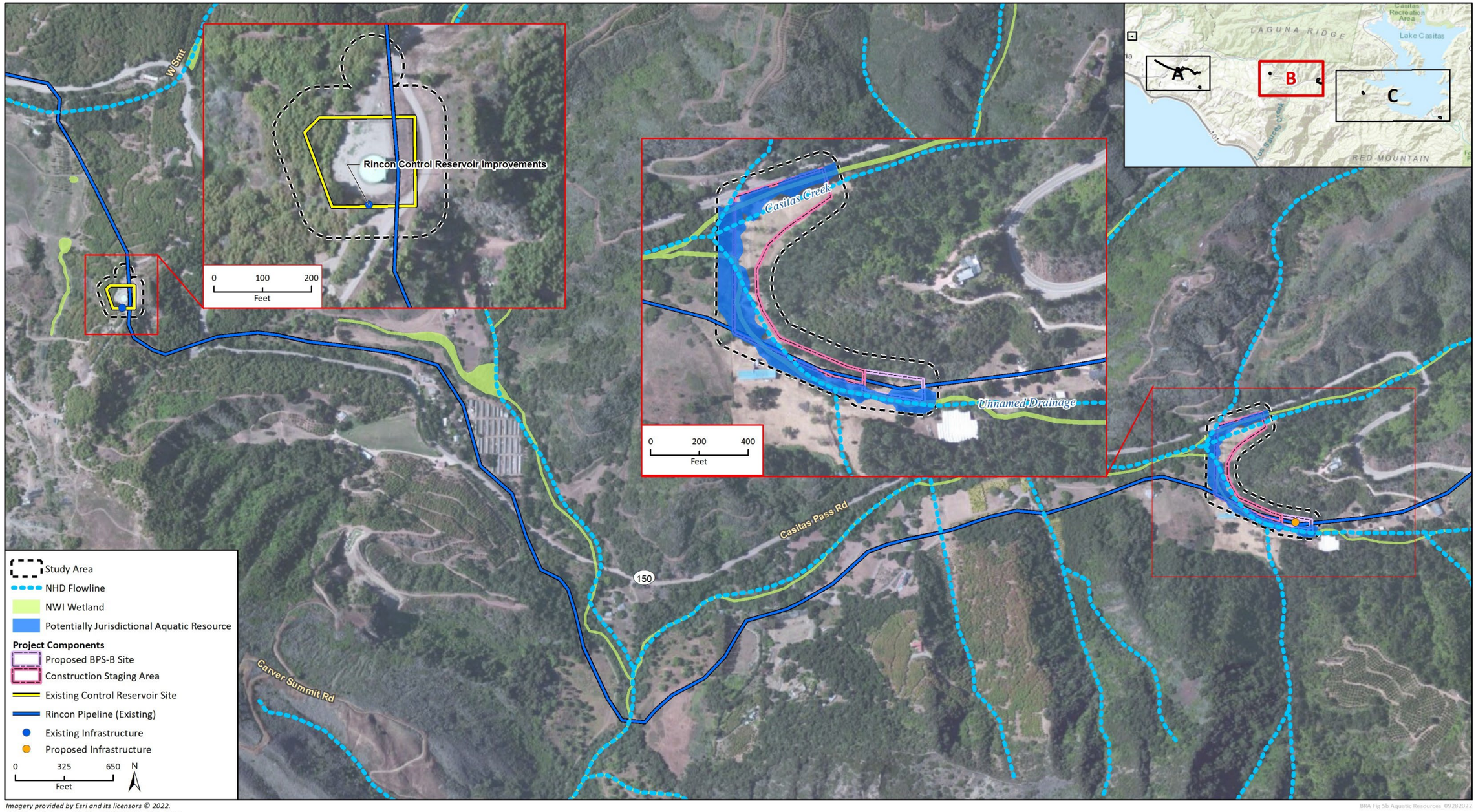


Figure 6b Potentially Jurisdictional Aquatic Resources



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Additional data provided by CMWD, NHD, NWI, 2022.

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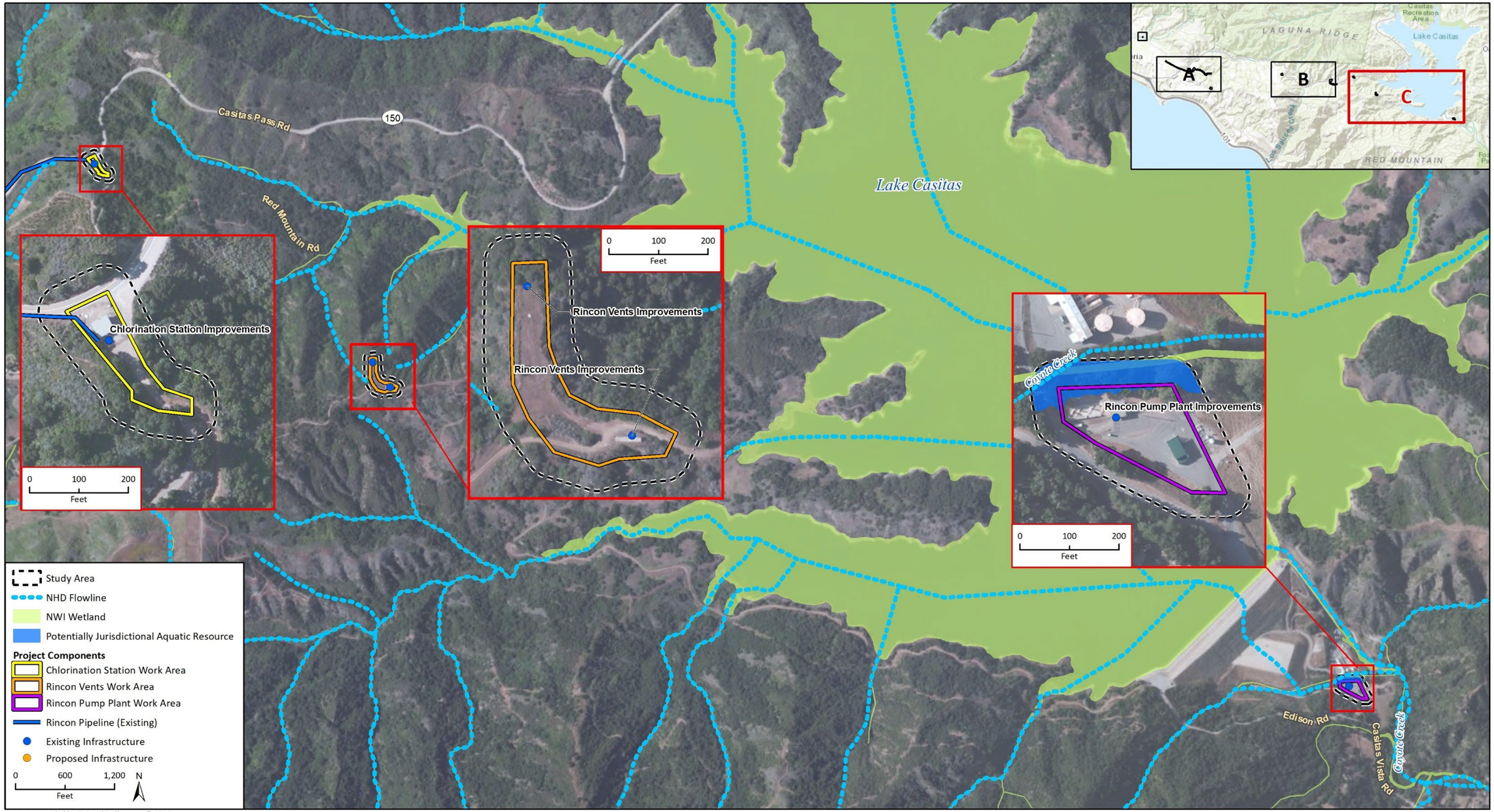
Figure 6c Potentially Jurisdictional Aquatic Resources



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Additional data provided by CMWD, NWI, NHD, 2022.

BRA Fig 5c Aquatic Resources

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between the Santa Ynez Mountains in the north and large blocks of natural areas along the coast and around Lake Casitas.

4.5 Resources Protected by Local Policies and Ordinances

The project site occurs within unincorporated Ventura and Santa Barbara counties. Furthermore, Casitas Pass Road falls within the coastal zone in Santa Barbara County while Rincon Creek and Rincon Road fall within the coastal zone in both counties. Casitas anticipates the proposed project would be implemented consistent with the policies and ordinances[6] established in the Ventura County General Plan Coastal Area Plan, Ventura County Coastal Zoning Ordinance, Santa Barbara County Article II Coastal Zoning Ordinance, and the Santa Barbara County Comprehensive Plan related to protecting coastal biological resources. Resources protected by policies and ordinances for each jurisdiction are discussed in the following subsections.

4.5.1 Ventura County General Plan Coastal Area Plan

The Ventura County General Plan Coastal Area Plan is intended to serve as Ventura County's "land use plan" and "local coastal element" applicable to the unincorporated portions of the coastal zone as required by the California Coastal Act of 1976, Public Resources Code Section 30000 et seq. The Ventura County General Plan Coastal Area Plan is also an Area Plan for the unincorporated coastal portions of Ventura County and, as such, is part of the Ventura County General Plan. The Ventura County General Plan Coastal Area Plan is divided into the following four zones: Coastal Zone, North Coast, Central Coast, and South Coast. The project site falls within the Coastal Zone and North Coast.

Under the Ventura County General Plan Coastal Area Plan, ESHA is defined as any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or harmed by human activities and development, including, but not limited to: *Areas of Special Biological Significance* as identified by the State Water Resources Control Board; rare and endangered species habitats identified by the CDFW; all coastal wetlands and lagoons; all marine, wildlife, and education and research reserves; nearshore reefs; stream corridors; lakes; tidepools; seacaves; islets and offshore rocks; kelp beds; significant coastal dunes; indigenous dune plant habitats; and wilderness and primitive areas. The following describes sections of the Ventura County General Plan Coastal Area Plan (Coastal Zone and North Coast) which may potentially be relevant to the proposed project components within the Coastal Zone of Ventura County.

Tree Protection

This policy protects trees functioning as important biological, watershed, visual and historic resources within coastal areas of Ventura County. This policy is relevant to the protected trees associated with Rincon Creek including southern California black walnut, arroyo willow, coast live

[6] Project components within Ventura County are subject to the Ventura County General Plan Coastal Area Plan and the Ventura County Coastal Zoning Ordinance. Project components within Santa Barbara County are subject to the Santa Barbara County Article II Coastal Zoning Ordinance and the Santa Barbara County Comprehensive Plan.

oak, California sycamore, elderberry, and Fremont cottonwood. Below is a summary of Ventura County's tree protection policy:

Protected Trees

1. The following types of trees are classified as protected trees when located within the coastal zone of Ventura County: trees contributing to the function and habitat value of an ESHA, native trees, historical trees, and heritage trees.
2. The removal of a protected tree which is ESHA, or tree alteration damaging ESHA, shall be prohibited except where:
   - The tree poses an imminent hazard to life, health, existing structures, or essential public services and where approved through an Emergency Permit; or
   - Removal or alteration of the tree is necessary to allow for a principal use or structure, and its associated fuel modification, where no feasible alternative exists to provide a reasonable economic use of the property, as evidenced by the alternatives analysis; or
   - Removal or alteration of the tree is a necessary component of an approved habitat restoration plan.
3. For protected trees not classified as ESHA, new development shall be sited and designed to avoid the removal of the protected tree or alteration damaging a protected tree. If there is no feasible project alternative avoiding such impacts to protected trees, then the project alternative shall be selected to minimize damage to protected trees in the following order of priority: native trees, historical trees, and heritage trees. Protected tree removal or alteration shall be undertaken in the following manner:
   - Principal Permitted Use/Structure: Protected tree removal or damage may be permitted where no feasible alternative exists to provide a reasonable economic use of the property, as evidenced by the alternatives analysis
   - Accessory Uses/Structures: With the exception of non-native heritage trees, removal of a protected tree shall be prohibited to increase the footprint of an existing use/structure or the placement of a new use/structure not previously approved with the original discretionary permit. Any approved development (e.g., paving and fence posts), including grading or excavation, that encroaches into the tree's protected zone shall be the minimum necessary to provide access, utility service, security, or privacy to the property.
4. Fire Clearance: With the exception of non-native heritage trees, new development shall be located and designed to minimize fire clearance and fuel modification maintenance requiring the removal of a protected tree, or alterations/protected zone encroachments damaging a protected tree. New accessory buildings or uses that extend fire clearance and fuel modification maintenance in a manner that requires the removal of a protected tree shall be prohibited.
5. Pruning: Pruning of a protected tree may be conducted in accordance with the Tree Ordinance Appendix T-1[7], provided such actions are taken to protect public safety, maintain access, or maintain the health of the tree. Pruning of ESHA trees identified as monarch butterfly roost sites shall be prohibited within the overwintering season (October through March).

[7] Located in the Ventura County General Plan Coastal Area Plan.

6. Mitigation Measures: When new development will result in the loss or degraded health of a protected tree, mitigation measures shall be required which include (but are not limited to) the planting of replacement native trees in the following manner:
   - Replacement tree planting shall occur within suitable, on-site areas at ratios ensuring success of the planted species;
   - A monitoring program shall be implemented to ensure the successful establishment of replacement trees;
   - Mitigation measures for protected trees classified as ESHA shall be developed in accordance with ESHA Mitigation Policies 10.1 - 10.7.

   Off-site mitigation, or contribution to an established in-lieu fee program, may be permitted when on-site mitigation is not feasible
7. Discretionary development shall be conditioned to ensure tree protection during construction, including but not limited to measures such as protective fencing, flagging, use of hand tools, and biological monitors to avoid damage to the protected zone of protected trees.
8. The planting of invasive trees shall be prohibited.
9. During the discretionary development process, encourage the removal of existing, non-native invasive trees except when such trees are classified as a protected tree.

Public Works

The objective of this policy is to maintain current service levels for existing developments. New or expanded public works facilities (including roads, flood control measures, water and sanitation) will be designed to serve the potential population within the subarea's boundaries, and to mitigate impacts on agricultural, open space lands, or environmentally sensitive habitats.

Environmentally Sensitive Habitats

The objective of this policy is to protect ESHA against any significant disruption of habitat values. ESHA shall be protected against any significant disruption of habitat values, and only uses dependent upon those resources shall be allowed within those areas. In all those cases, adverse impacts on ESHA shall be avoided, to the maximum extent feasible, and unavoidable impacts shall be minimized and mitigated.

- Development Adjacent to ESHA. Development in areas adjacent to ESHA shall be sited and designed to prevent impacts which would significantly degrade ESHA and shall be compatible with the continuance of the habitat.
- All development on land adjacent to or within a wetland or wet environment, or within 500 feet of such environments, shall be sited and designed to maintain water quality and prevent degradation of the ecosystem function. This policy is relevant to development in the vicinity of Rincon Creek.

4.5.2 Ventura County Coastal Zoning Ordinance

The Ventura County Coastal Zoning Ordinance was enacted on March 18, 1947. The Zoning Ordinance falls within Division 8 of the total Ventura County Ordinance Code and is specifically referenced as Chapter 1 of Division 8. The Zoning Ordinance established the initial regulatory scheme for structures and land uses. The following describes sections of the Ventura County Coastal

Zoning Ordinance which may potentially be relevant to the proposed project components within the Coastal Zone of Ventura County.

Section 8178-7 – Tree Protection Regulations

This ordinance applies to the pruning, removal, trenching, excavation, or other encroachment into the tree protected zone (five feet outside a tree canopy's edge and a minimum of 15 feet from the trunk) of protected trees in the Ventura County coastal zone. Protected trees are defined as followed:

1. Any tree meeting one or more of the following criteria shall be classified as ESHA:
   - The tree is located within any ESHA or is classified as ESHA by a qualified biologist
   - The tree exhibits evidence of raptor nesting, breeding colony, colonial roost (for migratory birds), or has been identified as a monarch butterfly roosting site, as determined in writing by a qualified biologist or ornithologist or as determined by the County biologist based on historical or current data
   - The tree was required to be planted or protected pursuant to a habitat restoration plan
2. Native trees defined as but not limited to oaks, arroyo willow, California sycamore, southern California black walnut, elderberry, Fremont cottonwood, white alder (*Alnus rhombifolia*), California ash (*Fraxinus dipetala*):
   - The tree is a minimum of three inches in diameter at 4.5 feet above existing grade
   - The tree is a multi-trunk tree with two or more trunks forking below four and 4.5 feet above the uphill side of the root crown with two of the trunks having a sum of six inches in diameter
3. Historic trees defined as a tree or group/grove of trees which have been identified by the County as a Cultural Heritage Site, or the tree or group/grove of trees listed in or formally determined eligible for listing in the California Register of Historic Resources and/or National Register of Historic Places. In addition to the foregoing requirements, a tree must meet one or more of the following criteria to be a historic tree:
   - The tree(s) is associated with events or persons making a significant contribution to the history of Ventura County, California or the nation
   - The tree(s) functions as an important biological, visual, or historic resource within the context of an historic landscape
   - The location of the tree(s) is associated with a historically significant view or setting
4. Heritage trees defined as non-native, non-invasive trees or group/grove of trees with unique value considered irreplaceable because of the tree's rarity, distinctive features (e.g., size, form, shape color), or prominent location with a community or landscape. Furthermore, a tree (or group/grove of trees) shall meet either of the following criteria:
   - The tree has a single trunk of 28 inches or more in diameter or with multiple trunks, two of which collectively measure 22 inches or more in diameter
   - If the tree species has naturally thin trunks when full grown, or trees with unnaturally enlarged trunks due to injury or disease (e.g., burls and galls), the tree must be at least 60 feet tall; or at least 75 years old, as verified by historical accounts, photographs, or associations with historic structures

A tree permit is required for the alteration, transplantation, or removal of any protected tree noted above. This ordinance is potentially relevant to protected trees associated with Rincon Creek and along SR 192 within the Coastal Zone.

4.5.3 Ventura County Non-Coastal Zoning Ordinance

The following describes sections of the Ventura County Non-Coastal Zoning Ordinance (NCZO; Ventura County 2022) which may potentially be relevant to the proposed project components within the Non-Coastal Zone of Ventura County.

Ventura County adopted the County Tree Protection Ordinance (County Ordinance) as part of the NCZO, to protect trees that contribute significantly to Ventura County's unique aesthetic, biological, cultural, and historical environment. In non-coastal zones that are not within a Scenic Resource Protection (SRP) Zone, the County Ordinance defines protected trees as such:

- Oaks and sycamores measuring 9.5 inches in circumference (approximately 3.02 inches in diameter) at 4.5 feet above ground for single-trunk trees
- Oaks with at least one trunk measuring 6.25 inches in circumference (approximately 2.06 inches in diameter) for multi-trunk trees
- Heritage trees of any species with a single trunk measuring 90 inches in circumference (28.6 inches in diameter); or with multi-trunks, two of which add up to 72 inches in circumference (22.9 inches in diameter)
- Historical trees of any species with historical or cultural significance as identified by the County

A permit is not required for encroachment into the tree protection zone (TPZ) of protected trees under certain circumstances, including but not limited to:

- Pruning and trimming of live limbs and roots, each of which is less than 20 percent of the tree trunk's diameter, provided such activities do not endanger the life of the tree, result in imbalance in structure, or remove more than 20 percent of the tree's canopy or root system

A ministerial permit may be obtained to alter,[8] fell, or remove a protected tree for reasons including but not limited to:

- Alteration, felling, or removal is necessary to construct improvements within the public right-of-way or other public utility right of way, as certified by a Registered Civil Engineer of the State of California in consultation and concurrence with a qualified tree consultant
- The tree(s) in its present form and/or location denies reasonable access to the subject property and/or construction, maintenance, or use of the property in a manner permitted by zoning on the said property. No more than five protected trees may be cumulatively altered, felled, or removed for this purpose, only three of which may be oak or sycamore trees, and none of which may be heritage or historical trees

A discretionary tree permit would be required to alter, fell, or remove a heritage or historical tree or four or more oaks or sycamores (cumulatively). If a discretionary tree permit is required, the

[8] For the purposes of this report, alteration is defined as removing more than 20% of the tree's canopy or root system, consistent with the County's standards for activities that could endanger the life of the tree.

applicant must submit a comprehensive Arborist Report and Tree Protection Plan and adhere to the County adopted Tree Protection Guidelines which supplement the County Ordinance.

4.5.4 Santa Barbara County Article II Coastal Zoning Ordinance

Pursuant to Public Resources Code Section 30500 of the California Coastal Act of 1976, the County of Santa Barbara was required to prepare a Local Coastal Plan (LCP) for portions of the unincorporated areas of Santa Barbara County within the coastal zone. Part of the requirements for development of the LCP includes the creation of a zoning ordinance. The following describes sections of the Santa Barbara County Article II Zoning Ordinance which may potentially be relevant to the proposed project components within Santa Barbara County.

Section 35-97.6 Finding Required for Approval of Coastal Development Permits

The purpose of this ordinance is to protect and preserve areas in which plant or animal life or their habitats are either rare or especially valuable because of their role in the ecosystem and which could be easily disturbed or degraded by human activities and developments. Furthermore, the intent of this ordinance is to ensure all development in such areas is designed and carried out in a manner providing maximum protection to sensitive habitat areas. As such, for development within ESHA, a Coastal Development Permit (CDP) is required. Prior to issuance of a CDP, a finding shall be made which the proposed development meets all applicable development standards in Sections 35-97.8 through 35-97.19.[9] This ordinance is potentially relevant to Rincon Creek and the sensitive plant communities discussed in Section 4.2.

Section 35-97.18 Development Standards for Native Plant Community Habitats

Under this ordinance, a CDP is required if impacts to native plant communities occur. Native plant communities consist of coastal sage scrub, chaparral, coastal bluff, closed cone pine forest, California native oak woodland (also individual oak trees), endangered and rare plant species as designated by the CNPS, and other plants of special interest such as endemics.

1. Oak trees, because they are particularly sensitive to environmental conditions, shall be protected. Land use activities, including cultivated agriculture and grazing, should be carried out in such a manner as to avoid damage to native oak trees. Regeneration of oak trees on grazing lands should be encouraged.
2. When sites are graded or developed, areas with significant amounts of native vegetation shall be preserved. All development shall be sited, designed, and constructed to minimize impacts of grading, paving, construction of roads or structures, runoff, and erosion on native vegetation. In particular, grading and paving shall not adversely affect root zone aeration and stability of native trees.

This ordinance is potentially relevant to Rincon Creek and sensitive plant communities discussed in Section 4.2.

[9] Only applicable ordinances are addressed in this BRA.

Section 35-97.19 Development Standards for Stream Habitats

Under this ordinance, the minimum buffer strip for streams in rural areas, as defined by the Coastal Land Use Plan, is presumptively 100 feet. However, this minimum buffer may be adjusted upward or downward on a case-by-case basis. The buffer is established based on an investigation of the factors such as: soil type and stability of stream corridors; how surface water filters into the ground, slope of land on either side of the stream; and location of the 100-year flood plain boundary. In addition to these factors, consultation with the CDFW and RWQCB is also required to protect the biological productivity and water quality of streams. Riparian vegetation is to also be protected in this buffer.

In addition, no structures are to be located within the stream corridor except: public trails; dams for necessary water supply projects; flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development; and other development where the primary function is for the improvement of fish and wildlife habitat. Culverts, fences, pipelines, and bridges (when support structures are located outside the critical habitat) may be permitted when no alternative route/location is feasible. This ordinance is potentially relevant to Rincon Creek.

Section 35-140 Tree Removal

The purpose of this ordinance is to regulate the removal of qualifying trees within the coastal zone. The intent is to preserve healthy trees important for the protection of habitat areas and the scenic and visual quality of Santa Barbara County. A CDP is required for the removal of any qualifying tree. A qualifying tree is defined as a tree which is six inches or more in diameter measured four feet above the ground and six feet or more in height and which is 1) located in a County street right-of-way; or 2) located within 50 feet of any major or minor stream except when such trees are removed for agricultural purposes; or 3) oak trees; or 4) used as a habitat by monarch butterflies. However, a CDP to remove a tree in the coastal zone shall only be issued for reasons such as: the tree is dead; the tree prevents the construction of a project for which a CDP has been issued and project redesign is not feasible; the tree is diseased and poses a danger to healthy trees in the immediate vicinity; or the tree is so weakened by age, disease, storm, fire, excavation, removal of adjacent trees, or any injury so as to cause imminent danger to persons or property. Qualifying trees (i.e., six inches or more in diameter measured four feet above the ground and six feet or more in height, located within 50 feet of any major or minor stream) under this ordinance were observed along Casitas Pass Road and the riparian corridor associated with Rincon Creek.

4.5.5 Santa Barbara County Comprehensive Plan

State law requires all counties adopt a comprehensive, long-term general plan which outlines physical development of a county; as such the Santa Barbara County Comprehensive Plan was developed. The general plan covers Santa Barbara County’s entire planning area so it can adequately address the broad range of issues associated with the county's development. The Comprehensive Plan expresses the community's development goals and embodies public policy relative to the distribution of future public and private land uses. The following two components (Coastal Land Use Plan and Conservation Element) of the Santa Barbara County Comprehensive Plan and their associated policies may potentially be relevant to the proposed project components within Santa Barbara County.

Coastal Land Use Plan

Policy 9-37

This policy consists of the same guidelines discussed above in the Santa Barbara County Article II Zoning Ordinance *Section 35-97.19 Development Standards for Stream Habitats*. This policy is potentially relevant to Rincon Creek.

Policy 9-38

This policy consists of the same guidelines discussed above in the Santa Barbara County Article II Zoning Ordinance *Section 35-97.19 Development Standards for Stream Habitats*. This policy is potentially relevant to Rincon Creek.

Policy 9-40

Under this policy, development, including dredging, filling, and grading within stream corridors, shall be limited to activities necessary for the construction of uses specified in *Policy 9-38* described in the previous subsection. When such activities require removal of riparian plant species, revegetation with local native plants shall be required except where undesirable for flood control purposes. This policy is potentially relevant to Rincon Creek.

Policy 9-41

Under this policy, permitted construction and grading within stream corridors shall be carried out in such a manner as to minimize impacts from increased runoff, sedimentation, biochemical degradation, or thermal pollution. This policy is potentially relevant to Rincon Creek.

Policy 9-42

The following activities are prohibited within stream corridors under this policy: cultivated agriculture, pesticide applications, except by a mosquito abatement or flood control district, and the installation of septic tanks. This policy is potentially relevant to Rincon Creek.

Conservation Element

Oak Tree Protection in the Inland Rural Areas of Santa Barbara County

This plan is a section of the Santa Barbara County Comprehensive Plan Conservation Element which provides for the protection of native oak trees in the inland rural areas of Santa Barbara County. To achieve protection of the oak tree resource, Santa Barbara County will regulate the removal of oak trees; seek financial assistance for landowners, incentives and purchase toward their conservation; and distribute information about oak trees and their propagation to promote oak woodland restoration.

Under *Development Standard 1: Protection of all species of mature oak trees* of this plan, all development shall avoid removal of or damage to mature oak trees, to the maximum extent feasible. Mature oak trees are considered to be live oak trees six inches or greater diameter at breast height and blue oak trees four inches or greater diameter at breast height or live and blue oaks six feet or greater in height. Native oak trees which cannot be avoided shall be replanted on site. When replanting oak trees on site is not feasible, replanting shall occur on receiver sites known to be capable of supporting the particular oak tree species, and in areas contiguous with existing

woodlands or savannas where the removed species occurs. This plan is potentially relevant to the coast live oak woodland and individual coast live oaks observed throughout the Santa Barbara County component of the Study Area.

4.6 Habitat Conservation Plans

The proposed project does not occur within any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Therefore, conservation plans are not addressed further within this analysis.

5 Impact Analysis and Mitigation Measures

Determination of impacts is done on a project-by-project basis. Because of the complexity of biological resource issues, substantial variation can occur between projects. Impact assessment must account for both short-term and long-term impacts. Impacts are classified as significant or less than significant, depending on the size, type, and timing of the impact and the biological resources involved. Disturbance to habitats and/or species are considered significant if they substantially affect significant biological resources. CEQA Guidelines Appendix G Checklist Initial Study Checklist for biological resources was referenced for assessing the project's potential effects on biological resources. The following issues were considered from CEQA Guidelines Appendix G to assess the project's potential impacts on sensitive biological resources

a) Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS).
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS.
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan.

This section discusses the potential adverse impacts to biological resources which may occur from implementation of the project and includes recommended avoidance, minimization, and mitigation measures to reduce impacts to less-than-significant levels.

For each impact identified herein, a statement of the level of significance of the impact is provided. Impacts are categorized in one of the following categories:

- No impact would result when no adverse change in the environment is expected or if implementation of the project would result in a benefit or positive effect on the environment. In such cases, no mitigation would be required.
- A less than significant impact would not cause a substantial change in the environment, although an adverse change in the environment may occur; only compliance with standard regulatory conditions would be required.
- A significant (but mitigable) impact would have a substantial adverse impact on the environment, but could be reduced to a less-than-significant level through successful implementation of identified mitigation measures.

- A significant unavoidable impact would cause a substantial adverse effect on the environment, and application of all feasible mitigation measures would not reduce the impact to a less-than-significant level.

5.1 Special Status Species

According to the CEQA Appendix G checklist, the proposed project would have a significant effect on biological resources if it would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.

5.1.1 Special Status Plant Species

Six special status plant species have a low potential to occur within the Study Area. The species with low potential to occur are associated with the coast live oak woodland, foothill grassland, coastal scrub, and riparian corridors throughout the Study Area. Given the minimal size of the impact area, surrounding agricultural and developed land cover and the low potential for occurrence, potential impacts would not likely reduce the populations of special status plant species below self-sustaining levels. Therefore, impacts to Santa Barbara honeysuckle, Davidson's brush-mallow, white-veined monardella, Ojai navarretia, Nuttall's scrub oak and Sonoran maiden fern would be less than significant and no mitigation measures are recommended.

5.1.2 Special Status Wildlife Species

No special status wildlife species were observed or detected during the biological reconnaissance surveys. Twelve special status wildlife species were determined to have low potential to occur within the Study Area based upon known ranges, habitat preferences for the species, and species occurrence records from the CNDDB. Crotch bumblebee, California monarch, California red-legged frog, coast range newt, western pond turtle, two striped garter snake, southwestern willow flycatcher, least Bell's vireo, and American badger have a low potential to occur within the Study Area. As described in Section 4.1.2, the Study Area lacks essential habitat elements needed to support the species. Therefore, these species are not expected to be impacted by the project.

California legless lizard and San Diego desert woodrat have a moderate potential to occur within coast live oak woodlands and scrub habitats within the Study Area. The yellow warbler has a high potential to occur within the riparian corridors within the Study Area, including Rincon Creek, Casitas Creek, Coyote Creek, and the unnamed drainage. As a result, project activities could potentially directly or indirectly impact individuals of these species. However, it should be noted that these SSC species with potential to occur are not geographically restricted to the vicinity of the study area, and injury/death to limited individuals would not contribute to a loss of population viability of these SSC species. Adherence to Measures BIO-1 and BIO-2 would reduce potential direct and indirect effects to these species to a less than significant level by delineating construction limits and training to identify special status species.

5.1.3 Nesting Birds

The Study Area contains habitat which can support protected nesting birds, including raptors, protected under the CFGC and the MBTA. The native, non-native, and ornamental vegetation throughout the Study Area provides suitable nesting habitat for avian species. Specifically, the mature coast live oak, California sycamore, and eucalyptus trees throughout the Study Area contain suitable habitat for raptor species while the various shrub layers provide suitable habitat for passerine species. Potentially significant direct impacts to raptors and other nesting birds may result if construction occurs while they are present within or adjacent to the project footprint, through direct mortality or abandonment of nests. The loss of a nest due to construction activities would be a violation of the MBTA and CFGC Section 3503. Implementation of Measure BIO-3 would maintain compliance with CFGC 3503 and the MBTA.

BIO-1 Worker Environmental Awareness Program

Prior to initiation of all construction activities (including staging and mobilization), all personnel associated with project construction shall attend a Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist to assist workers in recognizing special status biological resources which may occur in the Study Area. The training shall include information about nesting birds and the special status species potentially occurring in the Study Area.

The specifics of this program shall include identification of special status species and habitats, a description of the regulatory status and general ecological characteristics of special status resources, and review of the limits of construction and measures required to avoid and minimize impacts to biological resources within the work area. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employees, and other personnel involved with construction of the project. All employees shall sign a form provided by the trainer documenting they have attended the WEAP and understand the information presented to them. The crew foreperson shall be responsible for ensuring crew members adhere to the guidelines and restrictions designed to avoid impacts to special status species. If new construction personnel are added to the project, the crew foreman shall confirm new personnel receive the WEAP training before starting work. The subsequent training of personnel can include video of the initial training and/or the use of written materials rather than in-person training by a biologist.

BIO-2 Wildlife Avoidance During Construction

The following measures shall be adhered to during project construction:

- The contractor shall clearly delineate the construction limits and prohibit any construction-related traffic outside those boundaries
- Project-related vehicles shall observe a 10-mile-per-hour speed limit within the unpaved limits of construction
- All open trenches or excavations shall be fenced and/or sloped to prevent entrapment of wildlife species
- All food-related trash shall be disposed of in closed containers and removed from the project site at the end of each day. Construction personnel shall not feed or otherwise attract wildlife to the construction area.
- At project completion, all project-generated debris, vehicles, building materials, and rubbish shall be removed from the project site.

- No construction worker pets shall be allowed on the project site
- No firearms shall be allowed on the project site
- If vehicle or equipment maintenance is necessary, it shall be performed indesignated staging areas
- If construction must occur at night (between dusk and dawn), all lighting shall be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties and to reduce impacts on local wildlife.
- During construction, heavy equipment shall be operated in accordance with standard BMPs. All equipment used on-site shall be properly maintained to avoid leaks of oil, fuel, or residues. Provisions shall be in place to remediate any accidental spills immediately.

BIO-3 Preconstruction Nesting Bird Surveys

To avoid disturbance of nesting and special status birds, including raptor species, protected by the MBTA and CFGC, activities related to the project including, but not limited to, vegetation removal, ground disturbance, and construction and demolition shall occur outside the bird breeding season for migratory birds (January 1 through September 15), if practicable.

If construction must begin during the breeding season, a pre-construction nesting bird survey shall be conducted no more than three days prior to initiation of ground disturbance and/or vegetation removal activities. The preconstruction nesting bird survey shall be conducted on foot within the project footprint plus a 300-foot buffer . Inaccessible areas (e.g., private lands) shall be surveyed from afar using binoculars to the extent practicable. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California coastal communities. If active nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed breeding/nesting is completed, and the young have fledged the nest, or the nest has failed. Encroachment into the buffer shall occur only at the discretion of the qualified biologist.

5.2 Sensitive Plant Communities

The proposed project would have a significant effect on biological resources if it would:

b) Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.

California sycamore woodland is found within the footprint of the proposed BPS-B site and its associated construction staging area. Up to 2.34 acres of this sensitive vegetation community could be directly impacted by removal or degradation by project construction (Table 2). This impact would be significant without mitigation; however, by avoiding unanticipated impacts to the habitat with the use of temporary fencing throughout the duration of construction, implementation of Measures BIO-4 and BIO-5 would minimize impacts and compensate for impacts to sensitive plant communities.

HDD and/or construction materials (e.g., stockpiled materials, construction equipment, and trash) have the potential to result in potentially significant indirect impacts to native riparian communities. With implementation of BIO-1 and BIO-4, potential indirect impacts to sensitive plant communities would be reduced to a less-than-significant level.

BIO-4 Sensitive Habitat Fencing

Prior to project mobilization where the project is adjacent to sensitive natural communities, temporary construction fencing shall be erected by the contractor at the edge of the temporary construction easement to avoid unanticipated impacts to the habitat throughout the duration of construction.

BIO-5 Sensitive Vegetation Community Compensation

Impacts to sensitive vegetation communities shall be avoided to the greatest extent feasible. Depending on final project design, sensitive vegetation community compensation mitigation may be required by CDFW. Mitigation for unavoidable impacts to sensitive vegetation communities can be accomplished either through onsite restoration, offsite restoration, or purchase of credits through an approved Mitigation Bank or through applicant sponsored mitigation (e.g., purchase and/or dedication of land for mitigation). If required, compensatory mitigation for unavoidable impacts to sensitive vegetation communities shall be accomplished at a minimum ratio of 1:1; however, the final ratio shall be determined and approved by CDFW prior to issuance of a grading permit. If onsite or offsite restoration would occur, a Restoration Plan shall be prepared and submitted for approval by CDFW prior to initiating impacts. At minimum, the Restoration Plan shall include the following:

- A description of the purpose and goals of the restoration
- Identification of success criteria and performance standards
- Methods of site preparation
- Irrigation plan and schedule
- Best Management Practices (BMPs)
- Maintenance and monitoring program
- Adaptive management strategies
- Key stakeholders and responsible parties
- Funding
- Contingencies

5.3 Jurisdictional Waters and Wetlands

The proposed project would have a significant effect on biological resources if it would:

c) *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.*

Impacts to Coyote Creek are not anticipated based on the proposed project footprint. Casitas Creek and the unnamed drainage tributary to Casitas Creek may be impacted by the proposed BPS-B site and its associated construction staging area. Impacts to these features would be significant without

mitigation; however, implementation of Measures BIO-6 and BIO-7 would reduce impacts to a less than significant level.

The Rincon Creek crossing would be constructed using trenchless methods (HDD). This portion of Rincon Creek supports California sycamore woodland.

Indirect impacts from HDD and/or construction materials (e.g., stockpiled materials, construction equipment, and trash) which may be stored on site could adversely affect water quality (e.g., increased turbidity, altered pH, decreased dissolved oxygen levels, etc.) within the jurisdictional waters if runoff were to occur during storm events. Therefore, measures BIO-6 and BIO-7 shall be implemented within 100 feet of Rincon Creek, Casitas Creek, Coyote Creek, and the unnamed drainage to avoid potential indirect impacts to water quality within these jurisdictional features. With implementation of these mitigation measures (and adherence to agency permits and existing regulations), potential indirect impacts to jurisdictional features would be reduced to a less than significant level.

BIO-6 Jurisdictional Waters Avoidance and Minimization

The following measures shall be implemented during project construction:

- Prior project mobilization, all limits of construction work within Casitas Creek and the unnamed drainage shall be clearly delineated with orange construction fencing or similar highly visible material and maintained throughout the duration of construction.
- Areas of temporary disturbance shall be minimized to the extent practicable. Staging and laydown areas shall be limited to sites which are unvegetated and/or previously disturbed, and outside jurisdictional aquatic features .
- Materials shall be stored on impervious surfaces or plastic ground covers to prevent spills or leakage. Material storage and material/spoils from project activities shall be located and stored at least 50 feet from jurisdictional aquatic features. Construction materials and spoils shall be protected from stormwater runoff using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate.
- Prevent the discharge of silt or pollutants off the site when working adjacent to potentially jurisdictional waters. Install BMPs (i.e., silt barriers, sand bags, straw bales) as appropriate.
- Prevent the off-site tracking of loose construction and landscape materials by implementing street sweeping, vacuuming, and rumble plates, as appropriate.
- Site washout areas shall be at least 100 feet from a storm drain, open ditch, or surface water and prevent runoff flows from such activities from entering receiving water bodies.
- All vehicles and equipment shall be in good working condition and free of leaks. The contractor shall prevent oil, petroleum products, or any other pollutants from contaminating the soil or entering a watercourse (dry or otherwise). When vehicles or equipment are stationary, mats or drip pans shall be placed below vehicles to contain fluid leaks.
- All re-fueling, cleaning, and maintenance of equipment shall occur at least 100 feet from potentially jurisdictional waters.
- Any spillage of material shall be stopped if it can be done safely. The contaminated area shall be cleaned, and any contaminated materials properly disposed. For all spills, the project foreperson or other designated liaison shall notify Casitas immediately.
- Adequate spill prevention and response equipment shall be maintained on site and readily available to implement to minimize impacts to the aquatic and marine environments.

BIO-7 Compensatory Mitigation for Jurisdictional Waters Impacts

The following measures shall be implemented to mitigate impacts to jurisdictional wetlands/waters:

- Permits for the proposed impacts to jurisdictional water shall be obtained prior to initiating impacts. The discharge of fill into USACE jurisdictional areas will require a permit pursuant to Section 404 of the Clean Water Act and a 401 Certification from the RWQCB, and any modification to a streambed, including removal of riparian vegetation, will require a Streambed Alteration Agreement from CDFW pursuant to Section 1600 of the CFGC. The project shall comply with the mitigation required in accordance with the Streambed Alteration Agreement and the 401 and 404 permits.
- Impacts associated with disturbed areas within regulated waters shall be mitigated in-kind at a ratio of at least 1:1. It should be noted the final mitigation ratios required by the regulatory agencies during the permitting process may differ, but shall be confirmed prior to the initiation of applicable construction activities.
- A Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared by a qualified biologist/restoration ecologist to restore jurisdictional waters and/or CDFW sensitive plant communities temporarily impacted by the project. The HMMP shall address the restoration of temporarily disturbed habitat. At a minimum, the HMMP shall include the following:
  - A description of the jurisdictional waters, sensitive plant communities, riparian habitat, and /or ESHA type(s) and amount(s) which will be provided by the mitigation and how the mitigation method (i.e., restoration, establishment, enhancement, and preservation) will achieve the mitigation project goals
  - A plant palette and methods of salvaging, propagating, and seeding/planting the site to be restored
  - Methods of soil preparation
  - Maintenance and monitoring necessary to confirm the restored plant communities meet the success criteria
  - Schedule for restoration activities including weed abatement, propagation and planting, soil preparation, erosion control, qualitative and quantitative monitoring, and reporting
  - Identification of measurable performance standards for each objective to evaluate the success of the compensatory mitigation
  - Identification of contingency and adaptive management measures to address unforeseen changes in site conditions or other components of the mitigation project
- Compensatory mitigation for permanent impacts to jurisdictional waters can be accomplished either through purchase of credits through an approved Mitigation Bank or through applicant sponsored mitigation (e.g., purchase and/or dedication of land for mitigation). Compensatory mitigation shall be determined and approved by CDFW, USACE and RWQCB prior to impacting state of federally regulated waters. If onsite or offsite restoration would occur, a Restoration Plan shall be prepared and submitted for approval by CDFW, USACE and RWQCB prior to initiating impacts. At minimum, the Restoration Plan shall include the following:
  - A description of the purpose and goals of the restoration
  - Identification of success criteria and performance standards
  - Methods of site preparation
  - Irrigation plan and schedule

- Best Management Practices (BMPs)
- Maintenance and monitoring program
- Adaptive management strategies
- Key stakeholders and responsible parties
- Funding
- Contingencies

5.4 Wildlife Movement

The proposed project would have a significant effect on biological resources if it would:

d) Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.

Direct and indirect impacts to wildlife movement are not anticipated due to the type of construction, hours of operation and current human presence surround this project and the project would not impede the movement of wildlife throughout the region. Additionally, construction associated with the proposed project would be temporary and no permanent fencing would be erected that would interfere with terrestrial wildlife movement, in addition, construction will be limited to daylight hours only.

The project would not substantially limit or fragment the geographic range or dispersal routes of any sensitive species. As such, impacts to wildlife movement would be less than significant and therefore no measures are recommended.

5.5 Local Policies and Ordinances

The proposed project would have a significant effect on biological resources if it would:

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance

Santa Barbara County Article II Coastal Zoning Ordinance *Section 35-97.6* and *Section 35-97.18* supports the preservation of native plant communities and the species they support. A CDP is required if impacts to native plant communities (i.e., California native oak woodland and individual oak trees) will occur. Within Santa Barbara County, potential direct impacts from the project within 100 feet of areas meeting the definition a native plant community are expected to be limited to the existing public right-of-way and restored to pre-existing project conditions. Therefore, direct impacts to native plant communities protected by this ordinance would be less than significant. Furthermore, implementation of BIO-1, BIO-4, BIO-5 would further minimize impacts to native plant communities through avoidance, restoration, and compensatory mitigation as applicable. With compliance with a CDP (if required) and implementation of these measures, the project would not conflict with this ordinance.

Trees meeting the Counties of Ventura and Santa Barbara tree protection standards were observed throughout the Study Area. A large portion of the proposed project alignment is located within developed public rights-of-way which are lined with protected trees (e.g., coast live oak, arroyo willow, California sycamore, southern California walnut, and elderberry). Potential impacts to

protected trees may include, but are not limited to, construction equipment compacting soil around the trees, disturbance of the canopy and the root zone, and trenching in the root zone. No protected trees are proposed for removal[10]. Mitigation measure BIO-8 would reduce potential impacts to protected trees. With the appropriate County of Ventura and County of Santa Barbara permits and with implementation of this measure, the proposed project would not conflict with the Ventura County General Plan Coastal Area Plan *4.1.5., Tree Protection*, Ventura County Coastal Zoning Ordinance *Section 8178-7 – Tree Protection Regulations* and *Section 35-97.18 Development Standards for Native Plant Community Habitats*, Santa Barbara County Article II Coastal Zoning Ordinance *Section 35-140 Tree Removal*, and Santa Barbara County Comprehensive Plan: Conservation Element *Oak Tree Protection in the Inland Rural Areas of Santa Barbara County*.

BIO-8 Arborist Study and Tree Protection Plan

An Arborist Study shall be conducted within portions of the project footprint occurring within 20 feet of the canopy drip line of protected trees. The study will plot the location of protected trees within this zone, identify each protected tree, and determine the jurisdiction of any trees to be impacted. The Arborist Report shall be prepared by a Certified Arborist in compliance with both the County of Ventura and County of Santa Barbara ordinance guidelines (including coastal zone guidelines). Specifically, the Arborist Report should include, at minimum, the following:

- An inventory of all trees containing a canopy drip line within 20 feet of the project footprint, as feasible without trespassing on private lands. Inventory data should record, at minimum: diameter at breast height (DBH), height, canopy cover information/mapping, health and vigor rating.
- Representative photographs of each regulated tree which may be encroached upon.
- Description of proposed site development activities including, but not limited to, excavation for trenching, any tree trimming for access, and construction access routes.
- A project-specific Tree Protection Plan shall be prepared which would at a minimum include site plans, protective tree fencing, the designated tree protection zone (identifying an area sufficiently large enough to protect the tree and its roots from disturbance), activities prohibited/permitted within the tree protective zone, encroachment boundaries, and potential transplanting or replacement tree plantings.

The Arborist Report shall be completed consistent with the tree ordinance guidelines of the County of Ventura and County of Santa Barbara prior to the start of any tree-disturbing construction activities.

[10] Tree removal information was confirmed with Casitas Engineering Manager, Julia Aranda, via conversation on June 12, 2019.

5.6 Habitat Conservation Plans

The proposed project would have a significant effect on biological resources if it would:

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or State habitat conservation plan.

The project does not occur within any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan areas. The proposed project would not conflict with the provisions of any such plans. Therefore, no impact would occur.

6 Limitations, Assumptions, and Use Reliance

This BRA has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The biological investigation is limited by the scope of work performed. Reconnaissance biological surveys for certain taxa may have been conducted as part of this assessment but were not performed during a particular blooming period, nesting period, or particular portion of the season when positive identification would be expected if present, and therefore, cannot be considered definitive. The biological surveys are limited also by the environmental conditions present at the time of the surveys. In addition, general biological (or protocol) surveys do not guarantee the organisms are not present and will not be discovered in the future within the site. In particular, mobile wildlife species could occupy the site on a transient basis, or re-establish populations in the future. Our field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, jurisdictional areas, review of CNDDB RareFind5, and specified historical and literature sources. Standard data sources relied upon during the completion of this report, such as the CNDDB, may vary with regard to accuracy and completeness. In particular, the CNDDB is compiled from research and observations reported to the CDFW which may or may not have been the result of comprehensive or site-specific field surveys. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those which are practically reviewable without the need for extraordinary research and analysis.

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Appendix A

Regulatory Setting

Regulatory Setting

The following is a brief summary of the regulatory context under which biological resources are managed at the federal, state, and local levels. A number of federal and state statutes provide a regulatory structure that guides the protection of biological resources. Agencies with the responsibility for protection of biological resources within the project site include the following:

- U.S. Army Corps of Engineers (wetlands and other waters of the United States)
- U.S. Fish and Wildlife Service (federally listed species and migratory birds)
- National Marine Fisheries Service (marine wildlife and anadromous fishes)
- Central Coast Regional Water Quality Control Board (waters of the State)
- United States Fish and Wildlife Service (federally listed species and migratory birds)
- California Department Fish and Wildlife (riparian areas, streambeds, and lakes; State-listed species; Species of Special Concern; nesting birds)
- County of Ventura County (General Plan Coastal Area Plan and Ventura County Coastal Zoning Ordinance)
- County of Santa Barbara (Article II Coastal Zoning Ordinance, Comprehensive Plan: Coastal Land Use Plan and Conservation Element)

United States Army Corps of Engineers

The United States Army Corps of Engineers (USACE) is responsible for administering several federal programs related to ensuring the quality and navigability of the nation’s waters.

Clean Water Act Section 404

Congress enacted the Clean Water Act (CWA) “to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.” Section 404 of the CWA authorizes the Secretary of the Army, acting through the USACE, to issue permits regulating the discharge of dredged or fill materials into the "navigable waters at specified disposal sites."

Section 502 of the CWA further defines "navigable waters" as “waters of the United States, including the territorial seas.” “Waters of the United States” are broadly defined at 33 CFR Part 328.3 to include navigable waters, perennial and intermittent streams, lakes, rivers, ponds, as well as wetlands, marshes, and wet meadows. In recent years, the USACE and US Environmental Protection Agency (USEPA) have undertaken several efforts to modernize their regulations defining “waters of the United States” (e.g., the 2015 Clean Water Rule and 2020 Navigable Waters Protection Rule), but these efforts have been frustrated by legal challenges which have invalidated the updated regulations. Thus, the agencies’ longstanding definition of “waters of the United States,” which dates from 1986, remains in effect albeit with supplemental guidance interpreting applicable court decisions as described below.

Waters of the U.S.

In summary, USACE and USEPA regulations define “waters of the United States” as follows:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
    i. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
    ii. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    iii. Which are used or could be used for industrial purpose by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States;
5. Tributaries of waters identified in paragraphs (a)(1)-(4) of this section;
6. The territorial sea;
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in items 1-6 above.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the USEPA.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA are not waters of the United States.

The lateral limits of USACE jurisdiction in non-tidal waters is defined by the "ordinary high-water mark" (OHWM) unless adjacent wetlands are present. The OHWM is a line on the shore or edge of a channel established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed upon the bank, shelving, changes in the character of soil, destruction of vegetation, or the presence of debris (33 CFR 328.3(e)). As such, waters are recognized in the field by the presence of a defined watercourse with appropriate physical and topographic features. If wetlands occur within, or adjacent to, waters of the United States, the lateral limits of USACE jurisdiction extend beyond the OHWM to the outer edge of the wetlands (33 CFR 328.4 (c)). The upstream limit of jurisdiction in the absence of adjacent wetlands is the point beyond which the OHWM is no longer perceptible (33 CFR 328.4; see also 51 FR 41217).

Wetlands

The USACE defines wetlands as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3). The USACE’s delineation procedures identify wetlands in the field based on indicators of three wetland parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. The following is a discussion of each of these parameters.

Hydrophytic Vegetation

Hydrophytic vegetation dominates areas where frequency and duration of inundation or soil saturation exerts a controlling influence on the plant species present. Plant species are assigned wetland indicator status according to the probability of their occurring in wetlands. More than fifty percent of the dominant plant species must have a wetland indicator status to meet the hydrophytic vegetation criterion. The USACE published the National Wetland Plant List (USACE 2018), which separates vascular plants into the following four basic categories based on plant species frequency of occurrence in wetlands:

- **Obligate Wetland (OBL).** Almost always occur in wetlands
- **Facultative Wetland (FACW).** Usually occur in wetlands, but occasionally found in non-wetlands
- **Facultative (FAC).** Occur in wetlands or non-wetlands
- **Facultative Upland (FACU).** Usually occur in non-wetlands, but may occur in wetlands
- **Obligate Upland (UPL).** Almost never occur in wetlands

The USACE considers OBL, FACW and FAC species to be indicators of wetlands. An area is considered to have hydrophytic vegetation when greater than 50 percent of the dominant species in each vegetative stratum (tree, shrub, and herb) fall within these categories. Any species not appearing on the United States Fish and Wildlife Service's list is assumed to be an upland species, almost never occurring in wetlands. In addition, an area needs to contain at least 5% vegetative cover to be considered as a vegetated wetland.

Hydric Soils

Hydric soils are saturated or inundated for a sufficient duration during the growing season to develop anaerobic or reducing conditions that favor the growth and regeneration of hydrophytic vegetation. Field indicators of wetland soils include observations of ponding, inundation, saturation, dark (low chroma) soil colors, bright mottles (concentrations of oxidized minerals such as iron), gleying (indicates reducing conditions by a blue-grey color), or accumulation of organic material. Additional supporting information includes documentation of soil as hydric or reference to wet conditions in the local soils survey, both of which must be verified in the field.

Wetland Hydrology

Wetland hydrology is inundation or soil saturation with a frequency and duration long enough to cause the development of hydric soils and plant communities dominated by hydrophytic vegetation. If direct observation of wetland hydrology is not possible (as in seasonal wetlands), or records of wetland hydrology are not available (such as stream gauges), assessment of wetland hydrology is frequently supported by field indicators, such as water marks, drift lines, sediment deposits, or drainage patterns in wetlands.

Applicable Case Law and Agency Guidance

The USACE's regulations defining "waters of the United States" have been subject to legal interpretation, and two influential Supreme Court decisions have narrowed the definition to exclude certain classes of waters that bear an insufficient connection to navigable waters. In *Solid Waste Agency of Northern Cook County v. Army Corps of Engineers* (2001), the United States Supreme Court stated that the USACE's CWA jurisdiction does not extend to ponds that "are not adjacent to open water." In reaching its decision, the Court concluded that the "Migratory Bird Rule," which

served as the basis for the USACE's asserted jurisdiction, was not supported by the CWA. The Migratory Bird Rule extended CWA jurisdiction to intrastate waters "which are or would be used as habitat by birds protected by Migratory Bird Treaties or which are or would be used as habitat by other migratory birds which cross state lines…" The Court was concerned that application of the Migratory Bird Rule resulted in "reading the term 'navigable waters' out of the statute. Highlighting the language of the CWA to determine the statute's jurisdictional reach, the Court stated, "the term 'navigable' has at least the import of showing us what Congress had in mind as its authority for enacting the CWA: its traditional jurisdiction over waters that were or had been navigable in fact or which could reasonably be so made." This decision stands for the proposition that non-navigable isolated, intrastate waters are not waters of the United States and thus are not jurisdictional under the CWA.

In 2006 the United States Supreme Court decided *Rapanos v. United States* and *Carabell v. United States* (collectively "Rapanos"), which were consolidated cases determining the extent of CWA jurisdiction over waters that carry only an infrequent surface flow. The court issued no majority opinion in Rapanos. Instead, the justices authored five separate opinions including the "plurality" opinion, authored by Justice Scalia (joined by three other justices), and a concurring opinion by Justice Kennedy. To guide implementation of the decision, the USACE and USEPA issued a joint guidance memorandum ("Rapanos Guidance Memorandum") in 2008 stating that "regulatory jurisdiction under the CWA exists over a water body if either the plurality's or Justice Kennedy's standard is satisfied."

According to the plurality opinion in Rapanos, "the waters of the United States include only relatively permanent, standing or flowing bodies of water" and do not include "ordinarily dry channels through which water occasionally or intermittently flows." In addition, while all wetlands that meet the USACE definition are considered adjacent wetlands, only those adjacent wetlands that have a continuous surface connection because they directly abut the tributary (e.g., they are not separated by uplands, a berm, dike, or similar feature) are considered jurisdictional under the plurality standard.

Under Justice Kennedy's opinion, "the USACE's jurisdiction over wetlands depends upon the existence of a significant nexus between the wetlands in question and navigable waters in the traditional sense. Wetlands possess the requisite nexus, and thus come within the statutory phrase 'navigable waters,' if the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as 'navigable.' When, in contrast, wetlands' effects on water quality are speculative or insubstantial, they fall outside the zone fairly encompassed by the statutory term 'navigable waters.'" Justice Kennedy identified "pollutant trapping, flood control, and runoff storage" as some of the critical functions wetlands can perform relative to other waters. He concluded that, given wetlands' ecological role, "mere adjacency" to a non-navigable tributary was insufficient to establish CWA jurisdiction, and that "a more specific inquiry, based on the significant nexus standard, is therefore necessary."

Interpreting these decisions, and according to the Rapanos Guidance Memorandum, the USACE and USEPA will assert jurisdiction over the following waters:

- Traditional navigable waters;
- Wetlands adjacent to traditional navigable waters;

- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months); and,
- Wetlands that directly abut such tributaries.

The USACE and USEPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a traditional navigable water:

- Non-navigable tributaries that are not relatively permanent;
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent; and,
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

Where a significant nexus analysis is required, the USACE and USEPA will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters; and,
- Significant nexus includes consideration of hydrologic and ecologic factors.

The USACE and USEPA generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow); and,
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

Rivers and Harbors Act Section 10

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the USACE for the construction of any structure in or over any navigable water of the United States. Structures or work outside the limits defined for navigable waters of the United States require a Section 10 permit if the structure or work affects the course, location, or condition of the water body. The law applies to any dredging or disposal of dredged materials, excavation, filling, re-channelization, or any other modification of a navigable water of the United States, and applies to all structures and work. It further includes, without limitation, any wharf, dolphin, weir, boom breakwater, jetty, groin, bank protection (e.g., riprap, revetment, bulkhead), mooring structures such as pilings, aerial or subaqueous power transmission lines, intake or outfall pipes, permanently moored floating vessel, tunnel, artificial canal, boat ramp, aids to navigation, and any other permanent, or semi-permanent obstacle or obstruction. It is important to note that Section 10 applies only to navigable waters, and thus does not apply to work in non-navigable wetlands or tributaries. In some cases, Section 10 authorization is issued by the USACE concurrently with CWA Section 404 authorization, such as when certain Nationwide Permits are used.

Regional Water Quality Control Board

The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) have jurisdiction over "waters of the State," which are defined as any surface water or groundwater, including saline waters, within the boundaries of the state (California Water Code sec. 13050(e)). These agencies also have responsibilities for administering portions of the CWA.

Clean Water Act Section 401

Section 401 of the CWA requires an applicant requesting a federal license or permit for an activity that may result in any discharge into navigable waters (such as a Section 404 Permit) to provide state certification that the proposed activity will not violate state and federal water quality standards. In California, CWA Section 401 Water Quality Certification (Section 401 Certification) is issued by the RWQCBs and by the SWRCB for multi-region projects. The process begins when an applicant submits an application to the RWQCB and informs the USACE (or the applicable agency from which a license or permit was requested) that an application has been submitted. The USACE will then determine a "reasonable period of time" for the RWQCB to act on the application; this is typically 60 days for routine projects and longer for complex projects but may not exceed one year. When the period has elapsed, if the RWQCB has not either issued or denied the application for Section 401 Certification, the USACE may determine that Certification has been waived and issue the requested permit. If a Section 401 Certification is issued it may include binding conditions, imposed either through the Certification itself or through the requested federal license or permit.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code section 13000 et seq.), the policy of the State is as follows:

- The quality of all the waters of the State shall be protected
- All activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason
- The State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation

The Porter-Cologne Act established nine RWQCBs (based on watershed boundaries) and the SWRCB, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The SWRCB provides program guidance and oversight, allocates funds, and reviews RWQCB decisions. In addition, the SWRCB allocates rights to the use of surface water. The RWQCBs have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The SWRCB and RWQCBs have numerous nonpoint source related responsibilities, including monitoring and assessment, planning, financial assistance, and management.

Section 13260 of the Porter-Cologne Act requires any person discharging or proposing to discharge waste that could affect the quality of waters of the State to file a Report of Waste Discharge with

the appropriate RWQCB. The RWQCB may then authorize the discharge, subject to conditions, by issuing Waste Discharge Requirements (WDRs). While this requirement was historically applied primarily to outfalls and similar point source discharges, the SWRCB's *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*, effective May 2020, make it clear that the agency will apply the Porter-Cologne Act's requirements to discharges of dredge and fill material as well. The *Procedures* state that they are to be used in issuing CWA Section 401 Certifications and WDRs, and largely mirror the existing review requirements for CWA Section 404 Permits and Section 401 Certifications, incorporating most elements of the USEPA's *Section 404(b)(1) Guidelines*. Following issuance of the *Procedures*, the SWRCB produced a consolidated application form for dredge/fill discharges that can be used to obtain a CWA Section 401 Water Quality Certification, WDRs, or both.

Non-Wetland Waters of the State

The SWRCB and RWQCBs have not established regulations for field determinations of waters of the state except for wetlands currently. In many cases the RWQCBs interpret the limits of waters of the State to be bounded by the OHWM unless isolated conditions or ephemeral waters are present. However, in the absence of statewide guidance each RWQCB may interpret jurisdictional boundaries within their region and the SWRCB has encouraged applicants to confirm jurisdictional limits with their RWQCB before submitting applications. As determined by the RWQCB, waters of the State may include riparian areas or other locations outside the OHWM, leading to a larger jurisdictional area over a given water body compared to the USACE.

Wetland Waters of the State

Procedures for defining wetland waters of the State pursuant to the SWRCB's *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* went into effect May 28, 2020. The SWRCB defines an area as wetland if, under normal circumstances:

(i) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both;

(ii) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and

(iii) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

The SWRCB's *Implementation Guidance for the Wetland Definition and Procedures for Discharges of Dredge and Fill Material to Waters of the State* (2020), states that waters of the U.S. and waters of the State should be delineated using the standard USACE delineation procedures, taking into consideration that the methods shall be modified only to allow for the fact that a lack of vegetation does not preclude an area from meeting the definition of a wetland.

United States Fish and Wildlife Service

The United States Fish and Wildlife Service (USFWS) implements several laws protecting the Nation's fish and wildlife resources, including the Endangered Species Act (ESA; 16 United States Code [USC] Sections 153 et seq.), the Migratory Bird Treaty Act (MBTA; 16 USC Sections 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668).

Endangered Species Act

The USFWS and National Marine Fisheries Service (NMFS) share responsibility for implementing the ESA. Generally, the USFWS implements the FESA for terrestrial and freshwater species, while the NMFS implements the FESA for marine and anadromous species. Projects that would result in "take" of any threatened or endangered wildlife species, or a threatened or endangered plant species if occurring on federal land, are required to obtain permits from the USFWS or NMFS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan) of the ESA, depending on the involvement by the federal government in funding, authorizing, or carrying out the project. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what measures would be required to avoid jeopardizing the species. "Take" under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Proposed or candidate species do not have the full protection of the ESA; however, the USFWS and NMFS advise project applicants that they could be elevated to listed status at any time.

Migratory Bird Treaty Act

The MBTA of 1918 implements four international conservation treaties that the U.S. entered into with Canada in 1916, Mexico in 1936, Japan in 1972, and Russia in 1976. It is intended to ensure the sustainability of populations of all protected migratory bird species. The law has been amended with the signing of each treaty, as well as when any of the treaties were amended, such as with Mexico in 1976 and Canada in 1995. The MBTA prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the USFWS.

The list of migratory bird species protected by the law, in regulations at 50 CFR Part 10.13, is primarily based on bird families and species included in the four international treaties. A migratory bird species is included on the list if it meets one or more of the following criteria:

1. It occurs in the United States or U.S. territories as the result of natural biological or ecological processes and is currently, or was previously listed as, a species or part of a family protected by one of the four international treaties or their amendments.
2. Revised taxonomy results in it being newly split from a species that was previously on the list, and the new species occurs in the United States or U.S. territories as the result of natural biological or ecological processes.
3. New evidence exists for its natural occurrence in the United States or U.S. territories resulting from natural distributional changes and the species occurs in a protected family.

In 2004, the Migratory Bird Treaty Reform Act limited the scope of the MBTA by stating the MBTA applies only to migratory bird species that are native to the United States or U.S. territories, and that a native migratory bird species is one that is present as a result of natural biological or ecological processes. The MBTRA requires the USFWS to publish a list of all nonnative, human-introduced bird species to which the MBTA does not apply, and an updated list was published in 2020. The 2020 update identifies species belonging to biological families referred to in treaties the MBTA implements but are not protected because their presence in the United States or U.S. territories is solely the result of intentional or unintentional human-assisted introductions.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act prohibits anyone, without a permit issued by the USFWS, from "taking" bald or golden eagles, including their parts (including feathers), nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."

"Disturb" means “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment.

California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) derives its authority from the Fish and Game Code of California and administers several State laws protecting fish and wildlife resources and the habitats upon which they depend.

California Endangered Species Act

The California Endangered Species Act (CESA) (Fish and Game Code Section 2050 et. seq.) prohibits take of state listed threatened or endangered. Take under CESA is defined as “Hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill” (Fish and Game Code sec. 86). This definition does not prohibit indirect harm by way of habitat modification, except where such harm is the proximate cause of death of a listed species. Where incidental take would occur during construction or other lawful activities, CESA allows the CDFW to issue an Incidental Take Permit upon finding, among other requirements, that impacts to the species have been minimized and fully mitigated. Unlike the federal ESA, CESA’s protections extend to candidate species during the period (typically one year) while the California Fish and Game Commission decides whether the species warrants CESA listing.

Native Plant Protection Act

The CDFW also has authority to administer the Native Plant Protection Act (NPPA) (Fish and Game Code Section 1900 et seq.). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare, and prohibits the take of listed plant species. Effective in 2015, CDFW promulgated regulations (14 CCR 786.9) under the authority of the NPPA, establishing that the CESA’s permitting procedures would be applied to plants listed

under the NPPA as "Rare." With this change, there is little practical difference for the regulated public between plants listed under CESA and those listed under the NPPA.

Fully Protected Species Laws

The CDFW enforces Sections 3511, 4700, 5050, and 5515 of the Fish and Game Code, which prohibit take of species designated as Fully Protected. The CDFW is not allowed to issue an Incidental Take Permit for Fully Protected species; therefore, impacts to these species must be avoided. The exception is situations where a Natural Community Conservation Plan (NCCP) is in place that authorizes take of the fully protected species.

Avian Protection Laws

California Fish and Game Code sections 3503, 3503.5, and 3513 describe unlawful take, possession, or destruction of native birds, nests, and eggs. Section 3503.5 of the Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs. Section 3513 makes it a state-level offense to take any bird in violation of the federal Migratory Bird Treaty Act.

Protection of Lakes and Streambeds

California Fish and Game Code section 1602 states that it is unlawful for any person to "substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake" without first notifying the California Department of Fish and Wildlife (CDFW) of that activity. Thereafter, if CDFW determines and informs the entity that the activity will not substantially adversely affect any existing fish or wildlife resources, the entity may commence the activity. If, however, CDFG determines that the activity may substantially adversely affect an existing fish or wildlife resource, the entity may be required to obtain from CDFW a Streambed Alteration Agreement (SAA), which will include reasonable measures necessary to protect the affected resource(s), before the entity may conduct the activity described in the notification. Upon receiving a complete Notification of Lake/Streambed Alteration, CDFW has 60 days to present the entity with a Draft SAA. Upon review of the Draft SAA by the applicant, any problematic terms are negotiated with CDFW and a final SAA is executed.

The CDFW has not defined the term “stream” for the purposes of implementing its regulatory program under Section 1602, and the agency has not promulgated regulations directing how jurisdictional streambeds may be identified, or how their limits should be delineated. However, four relevant sources of information offer insight as to the appropriate limits of CDFW jurisdiction as discussed below.

- **The plain language of Section 1602 of CFGC** establishes the following general concepts:
  - References “river,” “stream,” and “lake”
  - References “natural flow”
  - References “bed,” “bank,” and “channel”
- **Applicable court decisions**, in particular *Rutherford v. State of California* (188 Cal App. 3d 1276 (1987), which interpreted Section 1602’s use of “stream” to be as defined in common law. The Court indicated that a “stream” is commonly understood to:
  - Have a source and a terminus

  - Have banks and a channel
  - Convey flow at least periodically, but need not flow continuously and may at times appear outwardly dry
  - Represent the depression between the banks worn by the regular and usual flow of the water
  - Include the area between the opposing banks measured from the foot of the banks from the top of the water at its ordinary stage, including intervening sand bars
  - Include the land that is covered by the water in its ordinary low stage
  - Include lands below the OHWM

- **CDFW regulations** defining "stream" for other purposes, including sport fishing (14 CCR 1.72) and streambed alterations associated with cannabis production (14 CCR 722(c)(21)), which indicate that a stream:
  - Flows at least periodically or intermittently
  - Flows through a bed or channel having banks
  - Supports fish or aquatic life
  - Can be dry for a period of time
  - Includes watercourses where surface or subsurface flow supports or has supported riparian vegetation

- **Guidance documents**, *including A Field Guide to Lake and Streambed Alteration Agreements* (CDFG 1994) and *Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility-Scale Solar Power Plants* (Brady and Vyverberg 2013), which suggest the following:
  - A stream may flow perennially or episodically
  - A stream is defined by the course in which water currently flows, or has flowed during the historic hydrologic course regime (approximately the last 200 years)
  - Width of a stream course can reasonably be identified by physical or biological indicators
  - A stream may have one or more channels (single thread vs. compound form)
  - Features such as braided channels, low-flow channels, active channels, banks associated with secondary channels, floodplains, islands, and stream-associated vegetation, are interconnected parts of the watercourse
  - Canals, aqueducts, irrigation ditches, and other means of water conveyance can be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife
  - Biologic components of a stream may include aquatic and riparian vegetation, all aquatic wildlife including fish, amphibians, reptiles, invertebrates, and terrestrial species which derive benefits from the stream system
  - The lateral extent of a stream can be measured in different ways depending on the particular situation and the type of fish or wildlife resource at risk

The tenets listed above, among others, are applied to establish the boundaries of streambeds in various environments. Importance of each factor may be weighted based on site-specific considerations and the applicability of the indicators to the streambed at hand.

Ventura County General Plan Coastal Area Plan

The Ventura County General Plan Coastal Area Plan is intended to serve as Ventura County's "land use plan" and "local coastal element" applicable to the unincorporated portions of the coastal zone as required by the California Coastal Act of 1976, Public Resources Code Section 30000 et seq. The Ventura County General Plan Coastal Area Plan is also an Area Plan for the unincorporated coastal portions of Ventura County and, as such, is part of the Ventura County General Plan. The Ventura County General Plan Coastal Area Plan is divided into the following four zones: Coastal Zone, North Coast, Central Coast, and South Coast.

Specific issues evaluated in each sub-area include environmentally sensitive habitats, recreation and access, agriculture, hazards, beach erosion, energy and industrial facilities, public works, and locating and planning of new development. Objectives are offered for each issue along with County Policies to achieve each objective.

Ventura County Coastal Zoning Ordinance

The Ventura County Coastal Zoning Ordinance was enacted on March 18, 1947. The Zoning Ordinance falls within Division 8 of the total Ventura County Ordinance Code and is specifically referenced as Chapter 1 of Division 8. The Zoning Ordinance established the initial regulatory scheme for structures and land uses.

Santa Barbara County Article II Coastal Zoning Ordinance

Pursuant to Public Resources Code Section 30500 of the California Coastal Act of 1976, the County of Santa Barbara must prepare a local coastal program (LCP) for the portion of the unincorporated area of the county within the coastal zone. Part of the requirements for development of the LCP includes the creation of a zoning ordinance. The County's local coastal program must include: (1) the Land Use Plan (LUP), which is the local coastal element (Public Resources Code Section 30108.55) of the County's general plan (Public Resources Code Section 30108.5);(2) a zoning ordinance, which is this Article, and (3) zoning district maps which apply the regulations of this ordinance to property, which when taken together, meet the requirements of and implement the provisions and policies of the Coastal Act of 1976, Public Resources Code Section 30108.6. The purposes of this ordinance are to:

- Protect, maintain, and where feasible, enhance and restore the overall quality of the Coastal Zone environment and its natural and manmade resources.
- Assure orderly, balanced utilization and conservation of Coastal Zone resources taking into account the social and economic needs of the people of this County and of the State.
- Maximize public access to and along the coast and maximize public recreational opportunities in the Coastal Zone consistent with sound resource conservation principles and constitutionally protected rights of private property owners.
- Assure priority for coastal-dependent and coastal-related development over other development on the coast.
- Provide a definite plan for development so as to guide the future growth of the County within the Coastal Zone.
- Protect the character and stability (social and economic) of agricultural, residential, commercial, and industrial areas.

Santa Barbara County Comprehensive Plan

State law requires all counties adopt a comprehensive, long-term general plan which outlines physical development of a county as such; Santa Barbara County Comprehensive Plan was developed. The general plan covers Santa Barbara County's entire planning area so it can adequately address the broad range of issues associated with the county's development. The Santa Barbara County Comprehensive Plan expresses the community's development goals and embodies public policy relative to the distribution of future public and private land uses.

The Coastal Land Use Plan component of the Santa Barbara County Comprehensive Plan was originally adopted by the Board of Supervisors on January 7, 1980 (Resolution 80-12). Subsequently, the plan was submitted to the South Central Regional Coastal Commission and the California Coastal Commission for review and certification. During the course of the State hearings, the Board of Supervisors approved several amendments to the plan. These amendments are incorporated into this document. The Santa Barbara County Coastal Plan was partially certified by the Coastal Commission on March 17, 1981. As of June 2019, the Board of Supervisors has certified and adopted all but a single outstanding issue regarding the west urban/rural boundary in Goleta and the land use designation for the Haskell's Beach property.

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Appendix B

Site Photographs

Photograph 1. Casitas Pass Road where the intertie pipeline is proposed; view facing east.

Photograph 2. Casitas Pass Road where the intertie pipeline is proposed; view facing west.

Photograph 3. Overview of Rincon Creek where HDD activities are proposed; view facing southeast.

Photograph 4. View of Rincon Control Reservoir; facing south.

Photograph 5. View of Rincon pipeline tie-in location neighbored by agricultural land; facing southwest.

Photograph 6. View of potential Booster Pump Station B-2 aligned by Casitas Creek to the right; facing south

Photograph 7. Back view of the Rincon Pump Plant and Coyote Creek to the right; facing west.

Photograph 8. View of the Chlorination Station; facing west.

Appendix C

Floral and Faunal Compendium

Plant Species Observed Within the Study Area

Scientific Name	Common Name	Native or Introduced
Acmispon glaber	deerweed	Native
Artemisia californica	coastal sage brush	Native
Artemisia douglasii	mugwort	Native
Baccharis pilularis	coyote brush	Native
Brassica sp.	mustard sp.	Introduced
Bromus diandrus	ripgut brome	Introduced
Bromus rubens	red brome	Introduced
Calystegia macrostegia	bindweed	Native
Calystegia sp.	morning glory sp.	Native
Carduus pycnocephalus	Italian thistle	Introduced
Carpobrotus edulis	iceplant	Introduced
Ceanothus megacarpus	bigpod ceanothus	Native
Ceanothus spinosus	greenbark ceanothus	Native
Centaurea melitensis	tocalote	Introduced
Centaurea solstitialis	yellow star thistle	Introduced
Chenopodium album	lamb's quarters	Native
Claytonia unguiculata	woodland clarkia	Native
Cynodon dactylon	Bermuda grass	Introduced
Diplacus aurantiacus	sticky monkeyflower	Native
Elymus condensatus	giant wild rye	Native
Epilobium canum	California fuchsia	Native
Erigeron canadensis	horseweed	Introduced
Eriogonum fasciculatum	California buckwheat	Native
Eriophyllum confertiflorum	golden yarrow	Native
Erodium moschatum	whitestem filaree	Introduced
Eschscholzia californica	California poppy	Native
Eucalyptus globulus	blue gum eucalyptus	Introduced
Foeniculum vulgare	fennel	Introduced
Hazardia squarrosa	sawtooth goldenbush	Native
Helminthotheca echioides	bristly ox tongue	Introduced
Heteromeles arbutifolia	toyon	Native
Hirschfeldia incana	summer mustard	Introduced
Hordeum marinum	seaside barley	Introduced
Isocoma menziesii	Menzies' goldenbush	Native
Juglans californica	southern California walnut	Native
Lactuca serriola	prickly lettuce	Introduced
Malosma laurina	laurel sumac	Native
Malva nicaeensis	bull mallow	Introduced
Malva parviflora	cheeseweed	Introduced

Scientific Name	Common Name	Native or Introduced
Melilotus album	white sweetclover	Introduced
Nicotiana glauca	tree tobacco	Introduced
Oxalis pes-caprae	Bermuda buttercup	Introduced
Persea americana	avocado	Introduced
Phoenix sp.	palm	Introduced
Pinus sp.	pine	Introduced
Platanus racemosa	California sycamore	Native
Populus fremontii	Fremont cottonwood	Native
Prunus persica	peach	Introduced
Pseudognaphalium californicum	everlasting	Native
Quercus agrifolia	coast live oak	Native
Raphanus sativa	wild radish	Introduced
Rhamnus crocea	redberry	Native
Rhus integrifolia	lemonade berry	Native
Ribes aureum	golden currant	Native
Ricinus communis	castor bean	Introduced
Rubus ursinus	California blackberry	Native
Salix lasiolepis	arroyo willow	Native
Salsola tragus	Russian thistle	Introduced
Salvia leucophylla	purple sage	Native
Sambucus nigra ssp. *caerulea*	blue elderberry	Native
Schinus molle	Peruvian pepper tree	Introduced
Scrophularia californica	California bee plant	Native
Stipa miliacea	smilo grass	Introduced
Torilis arvensis	field hedge parsley	Introduced
Toxicodendron diversilobum	poison oak	Native
Tribulus terrestris	puncture vine	Introduced
Tropaeolum majus	garden nasturtium	Introduced

Animal Species Observed Within the Study Area

Scientific Name	Common Name	Status	Native or Introduced
Birds			
Buteo lineatus	red-shouldered hawk	–	Native
Calypte anna	Anna's hummingbird	–	Native
Dryobates pubescens	downy woodpecker	–	Native
Melanerpes formicivorus	acorn woodpecker	–	Native
Icterus cucullatus	hooded oriole	–	Native
Sayornis nigricans	black phoebe	–	Native
Zenaida macroura	mourning dove	–	Native
Corvus brachyrhynchos	American crow	–	Native
Callipepla californica	California quail	–	Native
Aphelocoma californica	California scrub-jay	–	Native
Psaltriparus minimus	bushtit	–	Native
Chamaea fasciata	wrentit	–	Native
Geothlypis trichas	common yellowthroat	–	Native
Empidonax difficilis	pacific-slope flycatcher	–	Native
Pheucticus melanocephalus	black-headed grosbeak	–	Native
Mimus polyglottos	northern mockingbird	–	Native
Melozone crissalis	California towhee	–	Native
Pipilo maculatus	spotted towhee	–	Native
Stelgidopteryx serripennis	northern rough-winged swallow	–	Native
Melospiza melodia	song sparrow	–	Native
Carpodacus mexicanus	house finch	–	Native
Sturnus vulgaris	European starling	–	Introduced
Reptiles			
Sceloporus occidentalis	western fence lizard	–	Native

Rodewald, P. (Editor). 2015. The Birds of North America. Cornell Laboratory of Ornithology, Ithaca, NY. https://birdsna.org/Species-Account/bna/home (accessed July 2022).

California Herps. 2019. A Guide to the Amphibians and Reptiles of California. http://www.californiaherps.com/ (accessed July 2022).

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Appendix D

Special Status Species Evaluation Table

Special Status Plant and Animal Species in the Regional Vicinity of the Project Site

Scientific Name Common Name	Status[1]	Habitat Requirements	Potential for Occurrence/ Basis for Determination
Plants and Lichens			
Allium howellii var. clokeyi Mt. Pinos onion	G4T2/S2 1B.3	Great Basin scrub, pinyon and juniper woodland, meadows and seeps (edges). 1385-1800 m. perennial bulbiferous herb. Blooms Apr-Jun	**Not Expected.** No suitable habitat present within the Study Area. The Study Area is also outside the of the species' known elevation range.
Aphanisma blitoides aphanisma	G3G4/S2 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub. On bluffs and slopes near the ocean in sandy or clay soils. 3-305 m. annual herb. Blooms Feb-Jun	**Not Expected.** No coastal bluff scrub or coastal dunes present within the Study Area.
Astragalus didymocarpus var. *milesianus* Miles' milk-vetch	G5T2/S2 1B.2	Coastal scrub. Clay soils. 50-385 m. annual herb. Blooms Mar-Jun	**Not Expected.** Elements of suitable habitat were observed within the Study Area. Historical (1945) CNDDB species occurrence along Casitas Vista Road where it parallels Coyote Creek, general area approximately 0.4 mile west of the Rincon Pumping Plant. However, the record indicates exact location of species is unknown and was best mapped by CNDDB.
Astragalus pycnostachyus var. *lanosissimus* Ventura Marsh milk-vetch	FE/SE G2T1/S1 1B.1	Marshes and swamps, coastal dunes, coastal scrub. Within reach of high tide or protected by barrier beaches, more rarely near seeps on sandy bluffs. 1-35 m. perennial herb. Blooms (Jun)Aug-Oct	**Not Expected.** Elements of suitable habitat were observed within the Study Area. Historical (1911) CNDDB species occurrence approximately 0.3 mile southwest of the Rincon Pumping Plant. However, the record indicates exact location of species is unknown and the species occurrence was mapped in the general area of the City of Ventura.
Atriplex coulteri Coulter's saltbush	G3/S1S2 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Ocean bluffs, ridgetops, as well as alkaline low places. Alkaline or clay soils. 2-460 m. perennial herb. Blooms Mar-Oct	**Not Expected.** Elements of suitable habitat were observed within the Study Area; however, alkaline soils are not present within the Study Area.
Atriplex pacifica south coast saltscale	G4/S2 1B.2	Coastal scrub, coastal bluff scrub, playas, coastal dunes. Alkali soils. 1-400 m. annual herb. Blooms Mar-Oct	**Not Expected.** No suitable soils present within the Study Area.
Calochortus fimbriatus late-flowered mariposa-lily	G3/S3 1B.3	Chaparral, cismontane woodland, riparian woodland. Dry, open coastal woodland, chaparral; on serpentine. 270-1435 m. perennial bulbiferous herb. Blooms Jun-Aug	**Not Expected.** Elements of suitable habitat were observed within the Study Area. Historical (1960) CNDDB species occurrence approximately 1.5 miles southwest of the Rincon Pumping Plant. The species is presumed extant.
Calochortus palmeri var. *palmeri* Palmer's mariposa-lily	G3T2/S2 1B.2	Meadows and seeps, chaparral, lower montane coniferous forest. Vernally moist places in yellow-pine forest, chaparral. 485-2500 m. perennial bulbiferous herb. Blooms Apr-Jul	**Not Expected.** No suitable habitat present within the Study Area. The Study Area is also outside the of the species' known elevation range.

Scientific Name Common Name	Status[1]	Habitat Requirements	Potential for Occurrence/ Basis for Determination
Caulanthus lemmonii Lemmon's jewelflower	G3/S3 1B.2	Pinyon and juniper woodland, valley and foothill grassland. 75-1585 m. annual herb. Blooms Feb-May	**Not Expected.** Elements of suitable habitat were observed within the Study Area, but outside of the proposed project footprint. No direct impacts to this species suitable habitat will occur. No CNDDB records for this species occur within 5 miles of the Study Area.
Centromadia parryi ssp. *australis* southern tarplant	G3T2/S2 1B.1	Marshes and swamps (margins), valley and foothill grassland, vernal pools. Often in disturbed sites near the coast at marsh edges; also in alkaline soils sometimes with saltgrass. Sometimes on vernal pool margins. 0-975 m. annual herb. Blooms May-Nov	**Not Expected.** No suitable soils present within the Study Area.
Chaenactis glabriuscula var. *orcuttiana* Orcutt's pincushion	G5T1T2/S1 1B.1	Coastal bluff scrub, coastal dunes. Sandy sites. 3-80 m. annual herb. Blooms Jan-Aug	**Not Expected.** No coastal bluff scrub or coastal dunes present within the Study Area.
Chloropyron maritimum ssp. *maritimum* salt marsh bird's-beak	FE/SE G4?T1/S1 1B.2	Marshes and swamps, coastal dunes. Limited to the higher zones of salt marsh habitat. 0-10 m. annual herb (hemiparasitic). Blooms May-Oct(Nov)	**Not Expected.** No suitable habitat present within the Study Area. The Study Area is also outside the of the species' known elevation range.
Chorizanthe polygonoides var. *longispina* long-spined spineflower	G5T3/S3 1B.2	Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools. Gabbroic clay. 30-1540 m. annual herb. Blooms Apr-Jul	**Not Expected.** No suitable soils present within the Study Area.
Delphinium umbraculorum umbrella larkspur	G3/S3 1B.3	Cismontane woodland, chaparral. Mesic sites. 215-2075 m. perennial herb. Blooms Apr-Jun	**Not Expected.** Elements of suitable habitat were observed within the Study Area, but outside of the proposed project footprint. No direct impacts to this species suitable habitat will occur. No CNDDB records for this species occur within 5 miles of the Study Area.
Fritillaria ojaiensis Ojai fritillary	G3/S3 1B.2	Broadleafed upland forest (mesic), chaparral, lower montane coniferous forest, cismontane woodland. Usually loamy soil. Sometimes on serpentine; sometimes along roadsides. 100-1140 m. perennial bulbiferous herb. Blooms Feb-May	**Not Expected.** Elements of suitable habitat were observed within the Study Area, but outside of the proposed project footprint. No direct impacts to this species suitable habitat will occur. The closest known occurrence is associated with Catharina Creek, ~2.8 miles north of the Chlorination Station.

Scientific Name Common Name	Status[1]	Habitat Requirements	Potential for Occurrence/ Basis for Determination
Horkelia cuneata var. *puberula* mesa horkelia	G4T1/S1 1B.1	Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. 15-1645 m. perennial herb. Blooms Feb-Jul(Sep)	**Not Expected.** Elements of suitable habitat were observed within the Study Area. Historical (1901) CNDDB species occurrence along Highway 150, general area approximately centered on BPS-B. However, the record indicates exact location of species is unknown and was best mapped by CNDDB. This perennial species was not observed within the Study Area.
Imperata brevifolia California satintail	G4/S3 2B.1	Coastal scrub, chaparral, riparian scrub, Mojavean desert scrub, meadows and seeps (alkali), riparian scrub. Mesic sites, alkali seeps, riparian areas. 3-1495 m. perennial rhizomatous herb. Blooms Sep-May	**Not Expected.** No suitable soils present within the Study Area.
Lasthenia glabrata ssp. *coulteri* Coulter's goldfields	G4T2/S2 1B.1	Coastal salt marshes, playas, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. 1-1375 m. annual herb. Blooms Feb-Jun	**Not Expected.** No suitable soils present within the Study Area.
Layia heterotricha pale-yellow layia	G2/S2 1B.1	Cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland. Alkaline or clay soils; open areas. 90-1800 m. annual herb. Blooms Mar-Jun	**Not Expected.** No alkaline soils present within the Study Area.
Lonicera subspicata var. *subspicata* Santa Barbara honeysuckle	G5T2?/S2? 1B.2	Chaparral, cismontane woodland, coastal scrub. 5-825 m. perennial evergreen shrub. Blooms May-Aug(Dec-Feb)	**Low Potential.** Elements of suitable habitat were observed within the Study Area; however, the closest known occurrence is 0.25 mile southwest of the confluence of Gobernador Creek and El Dorado Creek, which is approximately 2.2 miles north of the western extent of the proposed intertie pipeline.
Malacothamnus davidsonii Davidson's bush-mallow	G2/S2 1B.2	Coastal scrub, riparian woodland, chaparral, cismontane woodland. Sandy washes. 150-1525 m. perennial deciduous shrub. Blooms Jun-Jan	**Low Potential.** Elements of suitable habitat were observed within the Study Area; however, there are no CNDDB records for this species within 5 miles of the Study Area.
Monardella hypoleuca ssp. *hypoleuca* white-veined monardella	G4T3/S3 1B.3	Chaparral, cismontane woodland. Dry slopes. 50-1280 m. perennial herb. Blooms (Apr)May-Aug(Sep-Dec)	**Low Potential.** Elements of suitable habitat were observed within the Study Area. Historical (1922, 1937) CNDDB species occurrences along Rincon Creek and Carpinteria Creek; however, records indicate exact locations of species are unknown and were best mapped by CNDDB.

Scientific Name Common Name	Status[1]	Habitat Requirements	Potential for Occurrence/ Basis for Determination
Navarretia ojaiensis Ojai navarretia	G2/S2 1B.1	Chaparral, coastal scrub, valley and foothill grassland. Openings in shrublands or grasslands. 275-620 m. annual herb. Blooms May-Jul	**Low Potential.** Elements of suitable habitat were observed within the Study Area. The closest known occurrence is from 1999 and 0.26 mile north of the Rincon pumping Plant. Species would have been identifiable during 2022 field survey and was not observed.
Navarretia peninsularis Baja navarretia	G3/S2 1B.2	Lower montane coniferous forest, chaparral, meadows and seeps, pinyon and juniper woodland. Wet areas in open forest. 1150-2365 m. annual herb. Blooms (May)Jun-Aug	**Not Expected.** No suitable habitat present within the Study Area.
Nolina cismontana chaparral nolina	G3/S3 1B.2	Chaparral, coastal scrub. Primarily on sandstone and shale substrates; also known from gabbro. 140-1275 m. perennial evergreen shrub. Blooms (Mar)May-Jul	**Not Expected.** No suitable soils present within the Study Area.
Quercus dumosa Nuttall's scrub oak	G3/S3 1B.1	Closed-cone coniferous forest, chaparral, coastal scrub. Generally on sandy soils near the coast; sometimes on clay loam. 15-640 m. perennial evergreen shrub. Blooms Feb-Apr (May-Aug)	**Low Potential.** Elements of suitable habitat were observed within the Study Area.
Sagittaria sanfordii Sanford's arrowhead	G3/S3 1B.2	Marshes and swamps. In standing or slow-moving freshwater ponds, marshes, and ditches. 0-605 m. perennial rhizomatous herb (emergent). Blooms May-Oct(Nov)	**Not Expected.** No suitable habitat present within the Study Area.
Sidalcea neomexicana salt spring checkerbloom	G4/S2 2B.2	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub. Alkali springs and marshes. 3-2380 m. perennial herb. Blooms Mar-Jun	**Not Expected.** No suitable soils present within the Study Area.
Streptanthus campestris southern jewelflower	G3/S3 1B.3	Chaparral, lower montane coniferous forest, pinyon and juniper woodland. Open, rocky areas. 605-2590 m. perennial herb. Blooms (Apr)May-Jul	**Not Expected.** No suitable habitat present within the Study Area.
Thelypteris puberula var. *sonorensis* Sonoran maiden fern	G5T3/S2 2B.2	Meadows and seeps. Along streams, seepage areas. 60-930 m. perennial rhizomatous herb. Blooms Jan-Sep	**Low Potential.** Elements of suitable habitat were observed within the Study Area; however, there are no CNDDB records for this species within 5 miles of the Study Area.
Invertebrates			
Bombus crotchii *Crotch bumble bee*	SC G2/S1S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia,* and *Eriogonum*.	**Low Potential.** Elements of suitable habitat were observed within scrub habitat within Study Area, but outside the project footprint.

Scientific Name Common Name	Status[1]	Habitat Requirements	Potential for Occurrence/ Basis for Determination
Branchinecta lynchi vernal pool fairy shrimp	FT G3/S2S3	Endemic to the grasslands of the Central Valley, central Coast Mountains, and South Coast Mountains. Inhabits, small clear water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	**Not Expected.** No suitable habitat present within the Study Area.
Danaus plexippus pop. 1 monarch - California overwintering population	FC G4T2T3/S2S3	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	**Low Potential.** Individual **e**ucalyptus trees were observed sporadically throughout the Study Area and could provide marginally suitable roosting habitat. No
Streptocephalus woottoni Riverside fairy shrimp	FE G1G2/S1S2	Endemic to western Riverside, Orange and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.	**Not Expected.** No suitable habitat present within the Study Area.
Fish			
Eucyclogobius newberryi tidewater goby	FE G3/S3 SSC	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	**Not Expected.** No suitable habitat present within Study Area.
Oncorhynchus mykiss irideus pop. 10 steelhead - southern California DPS	FE G5T1Q/S1	Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County). Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.	**Not Expected.** The species is associated with the Ventura River and its tributaries (e.g., Coyote Creek). The project footprint will be entirely in existing upland developed facilities. No activities will occur within Coyote Creek and no impacts will occur to this species.
Amphibians			
Rana draytonii California red-legged frog	FT G2G3/S2S3 SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	**Low Potential.** Riparian vegetation within the creeks throughout Study Area is present. Emergent vegetation and necessary aquatic conditions to support the species are absent. The closest CNDDB records to the Study Area are greater than 3 miles away and from 2005 and 2008.
Taricha torosa coast range newt	G4/S4 SSC	Coastal drainages from Mendocino County to San Diego County. Lives in terrestrial habitats and will migrate over 1 km to breed in ponds, reservoirs and slow moving streams.	**Low Potential.** Elements of suitable habitat are present along the creeks throughout the Study Area The closest known CNDDB record to the Study Area is greater than 4 miles away, associated with Coyote Creek and north of Lake Casitas.

Scientific Name Common Name	Status[1]	Habitat Requirements	Potential for Occurrence/ Basis for Determination
Reptiles			
Anniella pulchra California legless lizard	G3/S3 SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	**Moderate Potential.** Elements of suitable habitat are present along the creeks throughout the Study Area.
Emys marmorata western pond turtle	G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	**Low Potential.** Elements of suitable habitat are present along the creeks throughout the Study Area. Necessary aquatic conditions to support the species are absent.
Thamnophis hammondii two-striped gartersnake	G4/S3S4 SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	**Low Potential.** Elements of suitable habitat are present along the creeks throughout the Study Area. Necessary aquatic conditions to support the species are absent.
Birds			
Agelaius tricolor tricolored blackbird	ST G1G2/S1S2 SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	**Not Expected.** Suitable nesting habitat is not present within the Study Area.
Athene cunicularia burrowing owl	G4/S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	**Not Expected.** Suitable nesting habitat is not present within the Study Area.
Brachyramphus marmoratus marbled murrelet	FT/SE G3G4/S1	Feeds near-shore; nests inland along coast from Eureka to Oregon border and from Half Moon Bay to Santa Cruz. Nests in old-growth redwood-dominated forests, up to six miles inland, often in Douglas-fir.	**Not Expected.** No suitable habitat present within Study Area.
Charadrius alexandrinus nivosus western snowy plover	FT G3T3/S2S3 SSC	Sandy beaches, salt pond levees & shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	**Not Expected.** No suitable habitat present within Study Area.

Scientific Name Common Name	Status[1]	Habitat Requirements	Potential for Occurrence/ Basis for Determination
Empidonax traillii extimus southwestern willow flycatcher	FE/SE G5T2/S1	Riparian woodlands in southern California.	**Low Potential.** Elements of suitable foraging habitat are located within the creeks throughout the Study Area; however, the species is not known to breed throughout the Study Area and no CNDDB records have been reported within 5 miles of the Study Area.
Gymnogyps californianus California condor	FE/SE FP G1/S1	Require vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude. Deep canyons containing clefts in the rocky walls provide nesting sites. Forages up to 100 miles from roost/nest.	**Not Expected.** No suitable habitat present within Study Area.
Passerculus sandwichensis beldingi Belding's savannah sparrow	SE G5T3/S3	Inhabits coastal salt marshes, from Santa Barbara south through San Diego County. Nests in Salicornia on and about margins of tidal flats.	**Not Expected.** No suitable habitat present within Study Area.
Rallus obsoletus levipes light-footed Ridgway's rail	FE/SE G5T1T2/S1 FP	Found in salt marshes traversed by tidal sloughs, where cordgrass and pickleweed are the dominant vegetation. Requires dense growth of either pickleweed or cordgrass for nesting or escape cover; feeds on molluscs and crustaceans.	**Not Expected.** No suitable habitat present within Study Area.
Setophaga petechia yellow warbler	G5/S3S4 SSC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	**High Potential.** Suitable nesting and foraging habitat within the creeks throughout the Study Area.
Sterna antillarum browni California least tern	FE/SE G4T2T3Q/S2 FP	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	**Not Expected.** No suitable habitat present within Study Area.
Vireo bellii pusillus least Bell's vireo	FE/SE G5T2/S2	Summer resident of southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	**Low Potential.** Elements of suitable foraging habitat are located within the creeks throughout the Study Area; however, the species is not known to breed throughout the Study Area and no CNDDB records have been reported within 5 miles of the Study Area. Furthermore, the species is more closely associated with the Santa Ynez River in Santa Barbara County.

Scientific Name Common Name	Status[1]	Habitat Requirements	Potential for Occurrence/ Basis for Determination
Mammals			
Corynorhinus townsendii Townsend's big-eared bat	G3G4/S2 SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	**Not Expected.** No suitable roosting habitat present within Study Area.
Eumops perotis californicus western mastiff bat	G4G5T4/S3 S4 SSC	Occurs in open, semi-arid to arid habitats, including coniferous and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces and caves, and buildings. Roosts typically occur high above ground.	**Not Expected.** No suitable roosting habitat present within Study Area.
Neotoma lepida intermedia San Diego desert woodrat	G5T3T4/S3 S4 SSC	Coastal scrub of southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	**Moderate Potential.** Elements of suitable habitat are present within coast live oak woodland and scrub habitats throughout the Study Area.
Taxidea taxus American badger	G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	**Low Potential.** While suitable foraging habitat is present within the Study Area, badger dens were not observed during field surveys.

[1] Notes:

Regional Vicinity refers to within a 5 mile and an 8-quadrangle search radius of site.

FE = Federally Endangered	FT = Federally Threatened	FC = Federal Candidate Species	FS=Federally Sensitive
SE = State Endangered	ST = State Threatened	SC = State Candidate	SS=State Sensitive
SR = State Rare	FP = CDFW Fully Protected	SSC = CDFW Species of Special Concern	SFP = State Fully Protected

California Native Plant Society California Rare Plant Rank

1A=Presumed Extinct in California

1B=Rare, Threatened, or Endangered in California and elsewhere

2A=Plants presumed extirpated in California, but more common elsewhere

2B=Plants Rare, Threatened, or Endangered in California, but more common elsewhere

California Rare Plant Rank Threat Code Extension

.1=Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)

.2=Fairly endangered in California (20-80% occurrences threatened)

.3=Not very endangered in California (<20% of occurrences threatened)

Appendix C

Cultural Resources Assessment

Ventura-Santa Barbara Counties Intertie Project

Cultural Resources Assessment

prepared by

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Appendix A Records Search Results (Non-Confidential)

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Appendix C Resource Records (Confidential)

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Executive Summary

Casitas Municipal Water District (Casitas) retained Rincon Consultants, Inc. (Rincon) to perform a cultural resources assessment for the Ventura-Santa Barbara Counties Intertie Project (project) located in Ventura and Santa Barbara counties, California. The purpose of this report is to document the tasks conducted by Rincon; specifically, delineation of an Area of Potential Effects (APE), cultural resources records searches, built environment and archaeological field surveys, and documentation and evaluation of historic-period built environment resources identified within the project APE. Casitas conducted Native American and local historic group consultation for the purposes of Section 106 of the National Historic Preservation Act (NHPA). Casitas may be seeking federal funding from the United States Bureau of Reclamation (USBR) WaterSmart for the project. Should funding from USBR WaterSmart be received, compliance with Section 106 of the NHPA would be required. Therefore, this study was completed in accordance with the requirements of Section 106 of the NHPA and the California Environmental Quality Act (CEQA).

Five built environment resources are located within the APE; this includes two resources identified during the field surveys, the Rincon Chlorination Station and Rincon Pump Plant, and three previously identified built environment resources, State Route 192 (P-42-003622), Abbott Ranch (P-56-152756), and the Southern California Edison (SCE) Santa Clara-Ojai-Santa Barbara 66kV Transmission Line (P-56-153060). Each built environment resource in the APE was surveyed and evaluated for listing in the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), and local significance.

None of the five built environment resources identified within the APE are eligible for listing in the NRHP or the CRHR. Four of the built environment resources (Rincon Chlorination Station, Rincon Pump Plant, State Route 192 and the SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line) were also found ineligible for local designation; therefore, they are not considered historic properties for the purposes of Section 106 of the NHPA or historical resources in accordance with CEQA. One property, the Abbott Ranch, while not eligible for the NRHP or the CRHR, is eligible for local designation as a Ventura County Site of Merit. Locally eligible properties are considered historical resources for the purposes of CEQA. While the proposed project involves the installation of underground piping through a section of Abbott Ranch, the proposed construction and operation of the pipeline would not result in substantial adverse change to the historical resource as defined by CEQA Guidelines §15064.5 and the property would continue to retain the physical characteristics conveying its historical significance and justify its inclusion in a local register of historical resources.

Results of this cultural resources assessment indicate no archaeological resources are located in the APE. In addition to the negative study findings, existing disturbances from development suggests there is a low potential for encountering intact subsurface archaeological deposits within the project site. However, potential impacts to archaeological resources could occur in the unlikely event archaeological resources are unexpectedly discovered during project construction. Rincon presents the following recommended mitigation measure for unanticipated discoveries.

Based on the results of the cultural resources assessment, Rincon presents a finding of ***less than significant impact to historical resources*** under CEQA, ***less than significant impact to archaeological resources with mitigation incorporated*** under CEQA and ***no effect to historic properties*** under Section 106 of NHPA. No further cultural resources work is recommended for the project.

Unanticipated Discovery of Cultural Resources

In the event that archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist to be prehistoric, then a Native American representative 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 California Register of Historical Resources (CRHR) eligibility shall be completed. If the resource proves to be eligible for the CRHR and significant impacts to the resource cannot be avoided via project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of CCR Guidelines Section 15126.4(b)(3)(C). 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. Casitas 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 California Historical Resources Information System, per CCR Guidelines Section 15126.4(b)(3)(C).

Human Remains

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states 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 prehistoric, the Coroner would notify the Native American Heritage Commission, which would 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.

1 Introduction

Casitas Municipal Water District (Casitas) retained Rincon Consultants, Inc. (Rincon) to perform a cultural resources assessment for the Ventura-Santa Barbara Counties Intertie Project (project) in Ventura and Santa Barbara counties, California. The purpose of this report is to document the tasks conducted by Rincon; specifically, the delineation of the Area of Potential Effects (APE), cultural resource records searches, built environment and archaeological field surveys, documentation and evaluation of historic period built-environment resources identified within the project APE. Casitas conducted Native American and local historic group consultation for the purposes of Section 106 of the National Historic Preservation Act (NHPA). The study was completed in accordance with the requirements of Section 106 of the NHPA and the California Environmental Quality Act (CEQA).

1.1 Project Location and Description

The project site is in the unincorporated southwestern portion of Ventura County and the unincorporated southeastern portion of Santa Barbara County and is approximately 0.3 mile east of the city of Carpinteria (Figure 1). The project site traverses State Route (SR) 192 and SR 150, both of which are under the jurisdiction of the California Department of Transportation. Figure 2 shows an overview of the project site. Figure 3 shows the western portion of the project site, which includes the pipeline alignment and Booster Pump Station A (BPS-A) site. Figure 4 shows the Booster Pump Station B (BPS-B) site.

The project involves the construction and operation of potable water infrastructure to connect the Casitas and Carpinteria Valley Water District (CVWD) water transmission systems. The proposed project includes approximately 7,600 to 8,160 linear feet (LF; 1.3 to 1.5 miles) of new 16-inch-diameter potable water pipeline, two new booster pump stations, replacement of select portions of the existing Rincon Main, a new Rincon Main Storage Reservoir, and improvements to infrastructure at other existing Casitas facilities. The pipeline would traverse the boundary between Ventura and Santa Barbara counties and act as a two-way intertie to allow the transfer of water between Casitas and CVWD, as necessary.

1.2 Project Objectives

The proposed project would facilitate the transfer of water between Casitas and CVWD, thereby improving regional water supply reliability. Ventura and Santa Barbara counties are susceptible to natural disasters such as wildfires, mudslides, and earthquakes. The project would allow Casitas and Santa Barbara County water purveyors to transfer local potable water supplies in either direction, as necessary, and improve the resiliency of the local water distribution network. In addition, the project would provide Casitas with a means of accessing its State Water Project water allocations to supplement existing supplies resulting in a more resilient water supply portfolio. The proposed project would not be utilized to increase the amount of water currently being supplied to existing customers or to provide water to areas currently not serviced by Casitas or CVWD.

Figure 1 Regional Location Map

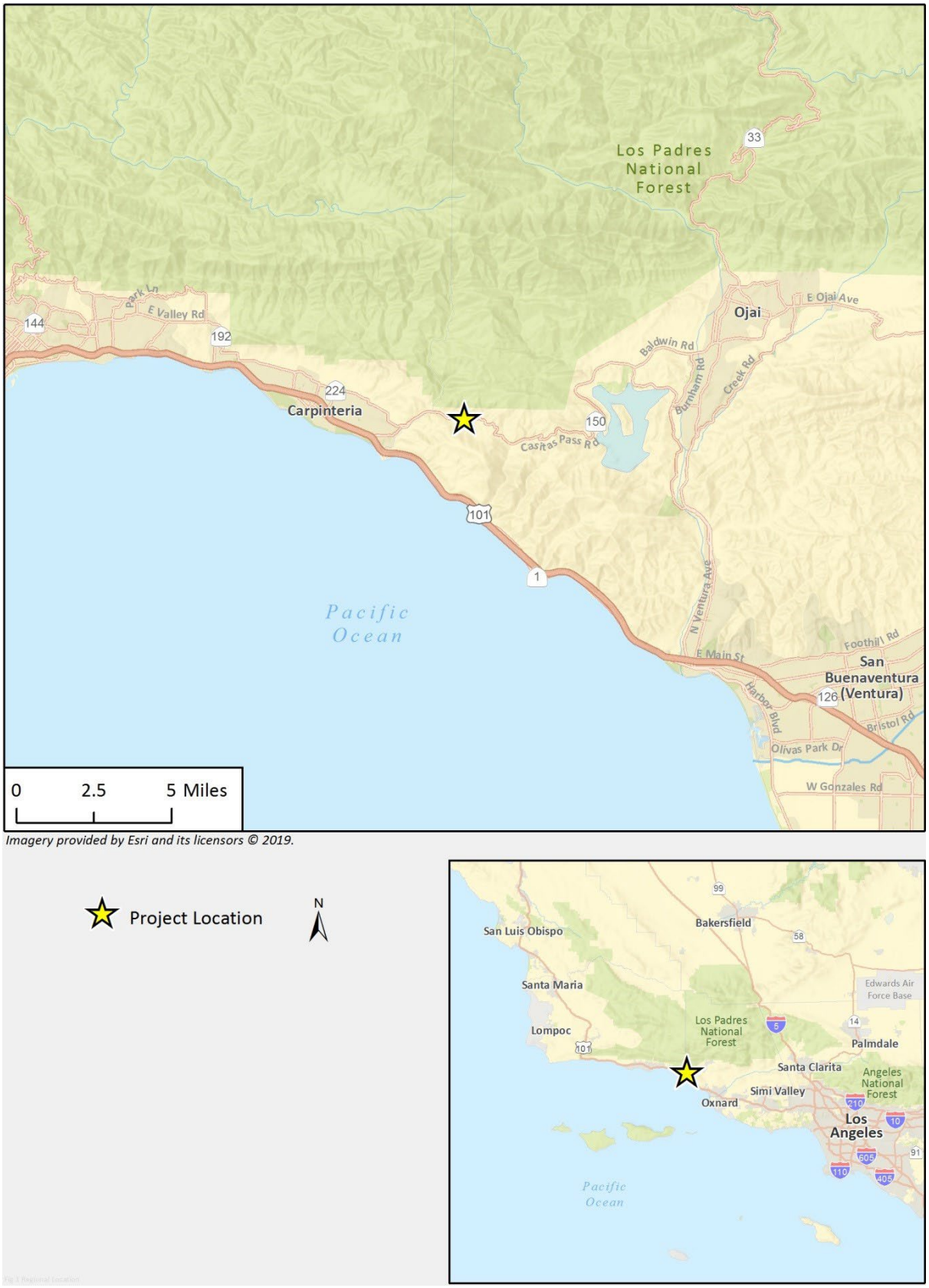

Figure 2 Project Location Map

Figure 3 Proposed Pipeline Alignment and Booster Pump Station Site A

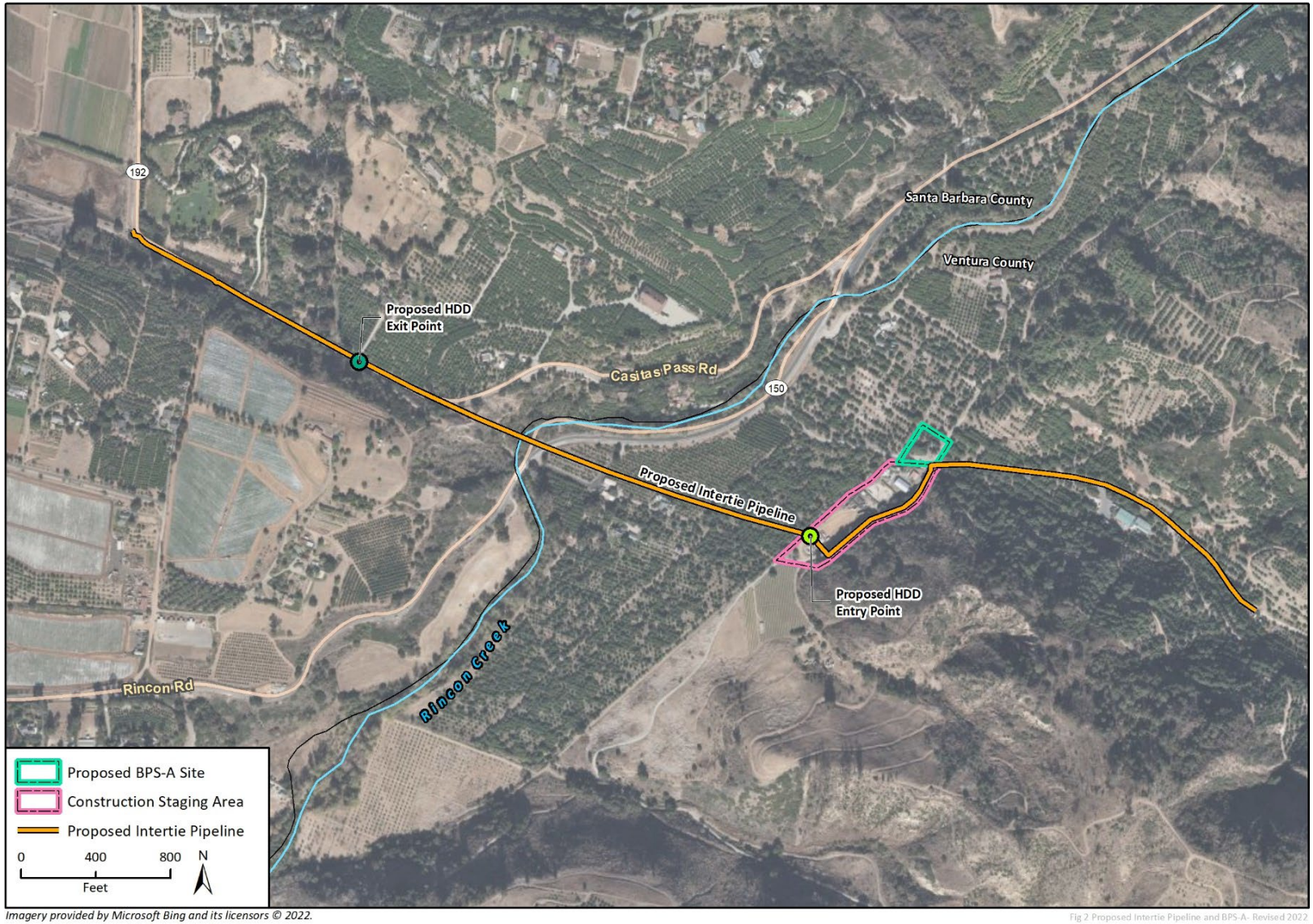

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Fig 2 Proposed Intertie Pipeline and BPS-A- Revised 2022

Figure 4 Proposed Booster Pump Station Site B

1.3 Project Components

This section describes the specific facilities included in the proposed project.

1.3.1 Pipeline

Alignment

The proposed project would include between approximately 7,600 to 8,160 LF of 16-inch-diameter, underground potable water pipeline. Up to approximately 4,800 LF of the proposed pipeline would be constructed in unincorporated Ventura County; the remainder of the pipeline would be constructed in unincorporated Santa Barbara County. The western terminus of the pipeline would connect to the existing CVWD 15-inch pipeline at the southeastern corner of Lake Jocelyn, located immediately northwest of the southernmost portion of the segment of SR 192 in Santa Barbara County which traverses north-south. From Lake Jocelyn, the pipeline would traverse southeast along SR 192, cross underneath Rincon Creek and SR 150, and extend east to connect to the existing Rincon Pipeline approximately 0.5 mile east of Rincon Creek.

The crossing of Rincon Creek and SR 150 would be completed via underground horizontal directional drilling (HDD) construction. After crossing Rincon Creek and SR 150, the pipeline would continue southeast through an orchard for approximately 1,500 LF before turning north at Avocado Hill Road, a private unpaved access road. The pipeline would continue for approximately 800 LF through an area of the orchard developed with outbuildings, where it would connect with another private, unpaved access road. The pipeline would turn east at that access road and continue for 2,000 LF, where the intertie would connect to the existing Rincon Main Pipeline.

The project also includes the replacement of four portions of the existing Rincon Main Pipeline with insufficient capacity, referred to as Replacements 1a, 1b, 1c, and 2a. Replacements 1a, 1b, and 1c are located directly east of the future BPS-A site, within the existing orchard. Replacements 1a, 1b, and 1c would include the replacement of approximately 10 LF, 200 LF, and 100 LF of the Rincon Main Pipeline, respectively. Replacement 2a is located directly east of BPS-B and would include the replacement of approximately 210 LF of the Rincon Main Pipeline.

Construction

Materials required for pipeline construction include pipe; fittings and appurtenances; sand, cement slurry, and natural earth material for backfill; and paving materials. All materials would be delivered to the staging areas at the beginning of construction and materials needed for the day's work would be taken from the staging areas to the work site. The staging areas for pipeline construction would be at existing, previously disturbed areas near the proposed alignment or along the pipeline alignment within paved roadways. It is estimated for each 1,000 LF of pipeline construction, five material deliveries per day would occur.

Proposed pipeline construction would primarily entail conventional, open-trench excavation within existing roadways. Open-trench excavation is a construction method typically utilized to install pipelines and their appurtenant structures, which include blow-offs, service meters, valves, and vaults. In general, the process of pipeline construction in a roadway would consist of site preparation, excavation and shoring, pipe installation and backfilling, and street restoration (where

applicable). Pipeline construction using open-trench method requires the use of an excavator, wheeled loader, dump truck, and vibrating compactor.

The following is a description of the phases of construction for open-cut trenching:

- **Site Preparation.** The existing pavement along the pipeline alignment is cut with a concrete saw or otherwise broken and removed using jackhammers, pavement breakers, and loaders. Other similar equipment may be used. The pavement is removed from the project site and recycled or disposed of at an appropriate facility.
- **Excavation and Shoring.** A trench is excavated along the alignment using backhoes, excavators, or other types of excavation equipment. Portions of the trench adjacent to existing utilities may be manually excavated. Approximately 2,900 cubic yards of soil and pavement[1] would be hauled away and disposed of at an appropriate facility. The remainder of the excavated soil would be temporarily stored adjacent to the trenches or stored at staging areas to be used as trench backfill.

  The pipeline requires a minimum 30-inch width at its deepest location to a five-foot-wide trench at the surface in which to work and place the pipe. Trenches would generally be no more than six feet deep, unless there is a need to cross another utility or a trenchless-construction crossing requires a deeper, rectangular boring pit. If crossing another utility is required, the proposed trench depth depends on the depth of the existing utility and required clearance (generally, at least one foot) between the proposed pipeline and the existing utility line. Maximum trench depth would be approximately 10 feet in these areas.
- **Pipe Installation and Backfilling.** Once the trench is excavated and shored (if necessary), the pipe and backfill material are placed in the trench. Backfill material around pipeline includes sand bedding, imported aggregate material, or a sand-cement slurry. Such material is placed at least four inches under the pipe, six inches on each side, and one foot above the pipe. Generally, every linear foot of pipeline requires 0.11 cubic foot of sand (i.e., 1,000 feet of pipeline requires 110 cubic feet of sand). Assuming approximately two feet of cover over the sand backfill, required earth (soil) backfill is 0.22 cubic foot per linear foot of pipeline. The remaining one foot of trench backfill is comprised of paving materials (see Street Restoration below). At the end of each workday, the trench is covered with steel plates for public safety and so traffic can resume use of the roadway in both directions.
- **Street Restoration.** Final paving is performed once the entire pipeline segment is installed. Paving progresses at the rate of approximately 1,000 square feet per day. Paving requires a wheeled loader, paving machine, and roller. Once the pavement is restored, traffic delineation (striping) is also restored.

Typical open-cut pipeline construction, including trenching, installing the pipe, backfilling, and temporary plating, is accomplished at approximately 200 to 300 LF per day.

Creek Crossing

The crossing of Rincon Creek would occur using the trenchless HDD method. Trenchless HDD construction involves excavating an entrance pit on one side of the creek and a receiving pit on the

[1] This approximated 2,900 cubic yards of soil and pavement is based on open-cut trenching for the proposed pipeline, which equate to approximately 4,400 LF of open-cut trenching (not including the segment of pipeline to be installed under Rincon Creek via trenchless crossing). It is estimated that approximately 0.65 cubic yard of soil and/or pavement would be hauled off-site for disposal (i.e., not used as trench backfill) per linear foot of pipeline installed (4,400 LF x 0.65 cubic yard per LF of open-cut trenching = 2,900 cubic yards of soil and/or pavement to be hauled off-site).

opposite side of the creek. A pilot hole is drilled along the pipeline alignment, followed by the enlarging of the hole by passing a larger cutting tool (back reamer) through the hole. The pipe is then placed in the hole beneath the creek using a drill stem; the back reamer pulls the pipe into place behind it. HDD requires the use of drilling fluid (comprised of a mixture of water and bentonite or polymer) to remove cuttings, stabilize the bore hole, cool the cutting head, and lubricate the passage of the pipe. Used drilling fluid is collected in a reclaimer machine to remove drill cuttings and maintain the proper viscosity during reuse of the fluid. Upon completion of pipe installation, the entrance pit and receiving pit are backfilled and the disturbed land or habitat is restored. The project-specific SWPPP would include measures to avoid/minimize potential impacts to water quality from this method of creek crossing, including, but not limited to, ensuring the drilling fluid is properly contained and avoiding frac-outs.[2] Approximately 500 CY of spoils will be removed during HDD construction, based off a 30-inch borehole.

1.3.2 Booster Pump Stations

The proposed project also involves the construction and operation of two booster pump stations: BPS-A and BPS-B. BPS-A would consist of an approximately 2,000-square foot concrete masonry unit (CMU) block wall building including the following water treatment facilities to provide the required secondary disinfectant conversion from one district's source water to the other: (1) a mechanical room with four vertical turbine pumps (two duty, one standby, and one jockey pump); (2) 500-gallon ammonia (40 percent liquid ammonium sulfate) storage tank and two ammonia feed pump skids housed in dedicated ammonia room; (3) 2,500-gallon, 12.5 percent sodium hypochlorite vertical storage tank with secondary chemical containment housed in a dedicated sodium hypochlorite room; (4) two sodium hypochlorite feed pump skids housed in dedicated sodium hypochlorite room; (5) electrical room with the pump variable frequency drives and electrical panels; and (6) an outdoor, 3,000-gallon surge tank. In addition, a temporary booster pump station consisting of a packaged pump system containing eight pumps would potentially be installed at the BPS-A site to provide pumping capacity while the BPS-A permanent structure is being constructed. The temporary booster pump station would only be implemented if water is available and would operate for a maximum of one year. The temporary booster pump station, if constructed, would be hauled onto the site on a skid roller and minimal ground disturbance would be required. The temporary booster pump station would tie directly into the electrical grid and no generator would be required. Minor ground disturbance would be required to tie the temporary booster pump station into the water piping. BPS-A would be located in unincorporated Ventura County adjacent to the pipeline alignment at the northwest intersection of Avocado Hill Road and an unpaved access road.

BPS-B would consist of an approximately 900-sf CMU block wall building housing three vertical turbine pumps (two duty and one standby pump) within a mechanical room. The building would also house the electrical room with the pump variable frequency drives and electrical panels. BPS-B would be located in unincorporated Ventura County on a previously disturbed area located approximately 740 feet south of SR 150, approximately 0.6 mile west of the intersection of SR 150 and Red Mountain Fire Road.

[2] HDD operations have a potential to release drilling fluids into the surface environment through frac-outs. A frac-out is the condition where drilling mud is released through fractured bedrock into the surrounding rock and sand and travels toward the surface. During the final design phase and upon close examination of geotechnical boring results and subsurface characteristics, the depth of the HDD is designed to achieve a minimum depth of cover to minimize the risk of a frac-out.

Each booster pump station would include an outdoor transformer and a meter/main switchboard. Construction of the booster pump stations would include: site grading; underground and aboveground piping; concrete pads for pumps, piping, and electrical equipment; electrical service from Southern California Edison; installation of pumps, motors, and electrical equipment, including emergency generators; minor site improvements such as fencing and awnings over equipment; and start-up and testing. Typical construction equipment would include an excavator, grader, crane, and standard work trucks. Construction supplies and equipment would be staged at each pump station site.

1.3.3 Improvements to Existing Casitas Infrastructure

The proposed project would require miscellaneous infrastructure improvements at a number of existing Casitas facilities:

- Rincon Main Pipeline
- Rincon Control Reservoir
- Rincon Vents
- Chlorination Station
- Rincon Pump Plant

Rincon Main Pipeline

The proposed project would implement minor surge protection improvements at several existing air-relief valve locations along the existing Rincon Main Pipeline.

Rincon Control Reservoir

The Rincon Control Reservoir is an existing 250,000-gallon welded steel tank facility located between the proposed BPS-A and BPS-B along the Rincon Main Pipeline. Currently, the facility accommodates water flows from the Casitas system towards the CVWD system. The proposed project would modify the existing facility to allow for water flow in the reverse direction. Improvements would include new bypass piping and valve configuration, as well as electrical and communication system modifications.

Chlorination Station

The existing Chlorination Station is currently out of operation. The facility is located adjacent to an 18-inch shepherds hook vent. The project would replace the existing vent at the Chlorination Station site with a new equivalent combination air release valve to accommodate the proposed project. The project would not bring the Chlorination Station back online.

Rincon Vents

The Rincon Vents are existing vent structures for the Rincon Main Pipeline, located along the southern side of SR 150, approximately 4,940 feet west of Lake Casitas. To accommodate the proposed project, minor electrical and mechanical improvements would be made to the site. Two options for mechanical improvements are under consideration: either the existing vent structures would be replaced with combination air release valves or taller standpipe vents, or a new level indicating transmitter would be added to the existing vent structure stilling well and the northern vent would be raised by 10 feet.

Rincon Pump Plant

The Rincon Pump Plant is an existing pump facility located southeast of Lake Casitas and east of the Lake Casitas Dam. The proposed project would include installation of a new pressure sustaining and reducing valve, a check valve, isolation valves, and approximately 130 LF of 18-inch bypass pipeline at the Rincon Pump Plant.

1.4 Area of Potential Effects

The APE of a project is defined in 36 Code of Federal Regulations (CFR) 800.16(d) as the "geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such property exists." The APE generally depicts all areas expected to be affected by the project, including staging and construction areas (Figure 5 through Figure 11). As defined for this project, the APE encompasses the proposed project footprint described above.

The APE must additionally be considered as a three-dimensional space and include any ground disturbance associated with the project. The maximum depth of ground disturbance for the project is expected to generally be approximately 5.2 feet within Caltrans ROW, 4.7 feet within private roads, and 4.2 feet within non-paved agricultural areas, unless there is a need to cross another utility or a trenchless-construction crossing requires a deeper, rectangular boring pit, where the maximum trench depth would be approximately 10 feet. Therefore, the vertical depth of the APE varies, but is not expected to exceed 10 feet in all areas.

The project APE is limited to the direct project footprint as most of the project elements are largely underground and there is limited potential for the project to have indirect effects (i.e., visual, auditory, or atmospheric). The installation of the pipeline would be located at- or below-grade and as such, its construction would not introduce any intrusive elements which may indirectly affect historic properties. Rincon understands any structures (pump stations) constructed as part of this project are minor structures which would not exceed 10 feet in height and would be limited to approximately 420 square feet in area. The pipeline and anticipated structures are not expected to have an indirect effect on the surroundings.

Figure 5 Area of Potential Effects Map

Figure 6 Area of Potential Effects Map – Proposed Intertie Pipeline, HDD Entry and Exit Points, BPS-A and Rincon Main Pipeline Improvements

Figure 7 Area of Potential Effects Map - Rincon Control Reservoir Improvements

Figure 8 Area of Potential Effects Map - Proposed BPS-B and Construction Staging Area

Figure 9 Area of Potential Effects Map - Chlorination Station Improvements

Figure 10 Area of Potential Effects Map – Rincon Vents Improvements

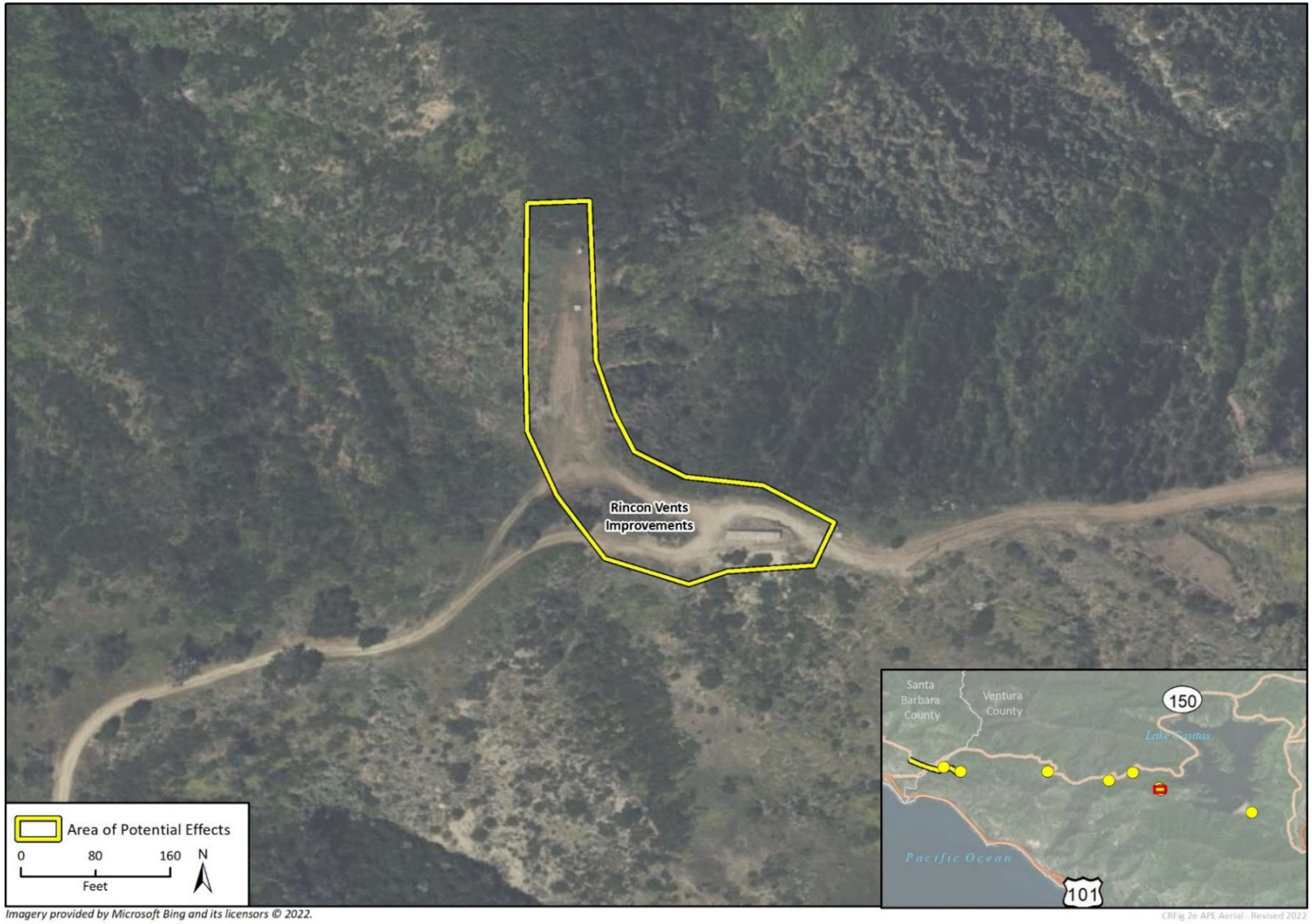

Figure 11 Area of Potential Effects Map – Rincon Pump Plant Improvements

1.5 Personnel

Rincon Cultural Resources Program Manager and Senior Archaeologist Breana Campbell-King, MA, RPA, served as the Principal Investigator for archaeological resources and meets the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology (Nation Park Service 1983. Ms. Campbell-King provided management oversight for this cultural resources assessment and is a contributing author of this report. Archaeologist Mark Strother, MA conducted the Native American outreach and contributed to this report. Architectural Historian Susan Zamudio-Gurrola, MHP, completed the local historic group consultation, a field survey, built environment evaluations, and is a contributing author of this report. Architectural Historian James Williams, MA, completed the updated local historic group consultation and built environment evaluations. Archaeologist Mary Pfeiffer, BA, conducted a cultural resources records search, field surveys, updated Native American outreach, and is a contributing author of this report. Archaeologist Peter Pham conducted a field survey of project components added to the project. Archaeologist Tricia Dodds, MA, RPA, and Architectural Historian Alexandra Madsen conducted cultural resources records searches for the project. Geographic Information Systems Analyst Emily Gaston, MS, prepared the figures found in this report. Principals Shannon Carmack, Senior Architectural Historian, Christopher Duran, MA, RPA, and Jennifer Haddow, PhD, reviewed this report for quality assurance and quality control.

2 Regulatory Setting

This section includes a discussion of the applicable state and local laws, ordinances, regulations, and standards governing cultural resources which should be adhered to before and during implementation of the proposed project.

2.1 Federal Regulations

The proposed project is considered a federal undertaking due to the potential for federal funding and is subject to Section 106 of NHPA. Section 106 applies when a project, activity, or program is funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency; those carried out with federal financial assistance; and those requiring a federal permit, license or approval. Cultural resources are considered during federal undertakings chiefly under Section 106 of NHPA of 1966 (as amended) through one of its implementing regulations, 36 CFR 800 (Protection of Historic Properties), as well as the National Environmental Policy Act. Properties of traditional, religious, and cultural importance to Native Americans are considered under Section 101 (d) (6) (A) of NHPA, and Section 106 36 CFR 800.3-800.10. Other federal laws include the Archaeological Data Preservation Act of 1974, the American Indian Religious Freedom Act of 1978, the Archaeological Resources Protection Act of 1979, and the Native American Graves Protection and Repatriation Act of 1989, among others.

Section 106 of NHPA (16 United States Code 470f) requires federal agencies to take into account the effects of their undertakings on historic properties and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings (36 CFR 800.1). Under Section 106, the significance of any adversely affected historic property is assessed and mitigation measures are proposed to reduce any impacts to an acceptable level. Historic properties are those significant cultural resources listed in or are eligible for listing in the National Register of Historic Places (NRHP) per the criteria listed below (36 CFR 60.4).

The quality of significance in American, state, and local history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects possessing integrity of location, design, setting, materials, workmanship, feeling, and association and meet one or more of the following criteria:

A. Are associated with events having made a significant contribution to the broad patterns of our history
   - Are associated with the lives of persons significant in our past
   - Embody the distinctive characteristics of a type, period, or method of installation, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction
   - Have yielded, or may be likely to yield, information important in prehistory or history

Ordinarily, cemeteries, birthplaces, or graves of historic figures; properties owned by religious institutions or used for religious purposes; structures moved from their original locations; reconstructed historic buildings; and properties primarily commemorative in nature are not considered eligible for the NRHP, unless they satisfy certain conditions. In general, a resource must

be 50 years of age to be considered for the NRHP, unless it satisfies a standard of exceptional importance.

2.2 State Regulations

CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1) or tribal cultural resources (PRC Section 21074[a] [1] [A]-[B]). A historical resource is a resource listed, or determined to be eligible for listing in the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or an object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a] [1-3]).

A resource shall be considered historically significant if it meets any of the following criteria:

1. Is associated with events which made a significant contribution to the broad patterns of California's history and cultural heritage
2. Is associated with the lives of persons important to our past
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
4. Has yielded, or may be likely to yield, information important in prehistory or history

Generally, a cultural resource must be at least 50 years of age to be considered for listing on the CRHR. Resources having achieved significance within the past 50 years may also be eligible for inclusion in the CRHR, provided enough time has lapsed to obtain a scholarly perspective on the events or individuals associated with the resource (Office of Historic Preservation n.d.:3).

In addition, if it can be demonstrated a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a], [b]).

PRC Section 21083.2(g) defines a unique archaeological resource as an artifact, object, or site about which it can be clearly demonstrated, without merely adding to the current body of knowledge, there is a high probability it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and there is a demonstrable public interest in such information
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person

As of July 1, 2015, California Assembly Bill 52 (AB 52) was enacted and expands CEQA by defining a new resource category called tribal cultural resources (TCRs). AB 52 establishes "a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states the lead agency shall establish measures to avoid impacts which would alter the significant characteristics of a TCR, when feasible (PRC Section 21084.3).

PRC Section 21074(a)(1)(A) and (B) defines TCRs as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and meets either of the following criteria:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources, as defined in PRC Section 5020.1(k)
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe

AB 52 also establishes a formal consultation process for California tribes regarding TCRs. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those having requested notice of projects proposed within the jurisdiction of the lead agency.

2.3 Local Regulations

2.3.1 County of Ventura

The County of Ventura Cultural Heritage Ordinance (Ordinance No. 4225, Sections 1360-1373) applies to the unincorporated areas of the county. It authorizes the Cultural Heritage Board (CHB) to establish, update, and maintain a list of buildings, structures, objects, and sites (including natural features) of historical, architectural, community or aesthetic merit, which are considered potentially eligible for Cultural Heritage designation. The CHB has the authority to designate Cultural Heritage Sites where the property owner has no objection to a site's designation. Where the property owner objects to said designation prior to final action by the CHB, the action of the CHB becomes a recommendation to the Board of Supervisors which has the final authority.

An eligible property may be nominated and designated as a landmark or point of historical interest if it satisfies the requirements set forth below:

A. Landmarks – satisfy one of the following criteria:
    1. It exemplifies or reflects special elements of the county's social, aesthetic, engineering, architectural or natural history
    2. It is associated with events having made a significant contribution to the broad patterns of Ventura County or its cities, regional history, or the cultural heritage of California or the United States
    3. It is associated with the lives of persons important to Ventura County or its cities, California, or national history
    4. It has yielded, or has the potential to yield, information important to the prehistory or history of Ventura County or its cities, California or the nation
    5. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values
    6. Integrity: Establish the authenticity of the resource's physical identity by evidence of lack of deterioration and significant survival of the characteristics which existed during its period of

importance. This shall be evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association

B. Sites of Merit – satisfy the following criteria:
   1. Sites of historical, architectural, community or aesthetic merit which have not been designated as landmarks or points of interest, but which are deserving of special recognition
   2. County approved surveyed sites with a National Register status code of 5 or above

C. Points of Interest – satisfy any one of the following criteria:
   1. It is the site of a building, structure, or object which no longer exists, but was associated with historic events, important persons or embodied a distinctive character or architectural style
   2. It has historical significance, but has been altered to the extent which the integrity of the original workmanship, materials, or style has been substantially compromised
   3. The site of a historic event which has no distinguishable characteristics other than such a historic event occurred at the site, and the site is not of sufficient historical significance to justify the establishment of a landmark

D. District – meets the criteria below:
   1. Possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development
   2. Has precisely mapped and defined exterior boundaries, which requires a description of what lies immediately on the edge of the district to allow rational exclusion of adjoining areas
   3. Has at least one of the criteria for significance of Section 1365-5.a.1-8
   4. Complies with the criteria for integrity contained in Section 1365-5.a.6

In addition to meeting the criteria in Section 1365-5 et seq, all the following standards must be met before a site becomes a designated Cultural Heritage Site:

a. It shall have historic, aesthetic or special character or interest for the general public, and not be limited in interest to a special group of persons;
b. Its designation shall not require the expenditure by the County of Ventura of any amount of money not commensurate with the value of the object to be preserved; and
c. Its designation shall not infringe upon the rights of a private owner thereof to make any and all reasonable uses thereof which are not in conflict with the purposes of this Article.

2.3.2 County of Santa Barbara

The County of Santa Barbara Municipal Code Chapter 18A, Sections 18A-1 through 18A-10 applies to the unincorporated areas of the county. It authorizes the establishment of a Historical Landmarks Advisory Commission and establishes the criteria to determine eligibility of any place, site, building, structure or object as a place of historic merit or landmark, listed below:

(a) It exemplifies or reflects special elements of the county's cultural, social, economic, political, archaeological, aesthetic, engineering, architectural or natural history;

(b) It is identified with persons or events significant in local, state or national history;

(c) It embodies distinctive characteristics of a style, type, period or method of construction or is a valuable example of the use of indigenous materials or craftsmanship;

(d) It is representative of the work of a notable builder, designer, or architect;

(e) It contributes to the significance of a historic area, being a geographically definable area possessing a concentration of historic, prehistoric, archaeological, or scenic properties, or thematically related grouping of properties, which contribute to each other and are unified aesthetically by plan or physical development;

(f) It has a location with unique physical characteristics or is a view or vista representing an established and familiar visual feature of a neighborhood, community, or the County of Santa Barbara;

(g) It embodies elements of architectural design, detail, materials, or craftsmanship representing a significant structural or architectural achievement or innovation;

(h) It reflects significant geographical patterns, including those associated with different eras of settlement and growth, particularly transportation modes or distinctive examples of park or community planning; and/or

(i) It is one of the few remaining examples in the county, region, state, or nation possessing distinguishing characteristics of an architectural or historical type or specimen.

The Commission shall have bylaws which provide additional guidance on eligibility for establishing landmarks and places of historic merit.

In designating any place, site, building, structure, work of art or other object as being of historic, aesthetic or other special character or interest and worthy of protection under this chapter, the Historic Landmarks Advisory Commission and the Board of Supervisors shall be subject to the following express standards:

(a) The landmark designated shall have historic, aesthetic or special character or interest for the general public and not be limited in interest to a special group of persons.

(b) The designation of such landmark shall not require the expenditure of an unreasonable amount of money to carry out the purposes of this chapter.

(c) The designation of such landmark shall not infringe upon the right of a private owner thereof to make any and all reasonable uses of such landmark which are not in conflict with the purposes of this chapter. (Ord. No. 4425, § 1)

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3 Setting

The project APE is located in the southwestern portion of Ventura County and the southeastern portion of Santa Barbara County, on unincorporated county land. The APE is in a semi-rural area and includes agricultural development. Vegetation, where present, consists primarily of non-native grasses, trees, and orchards. The elevation of the project area ranges from 116 to 278 feet above mean sea level.

3.1 Prehistoric Setting

The APE is located in what has been defined as the Northern California Bight (Northern Bight) archaeological region, one of eight organizational divisions of the state (Moratto 1984; Glassow et al. 2007; Moratto and Chartkoff 2007). The Northern Bight archaeological region encompasses the area from Vandenberg Air Force Base on the coast, south to Point Conception, including the Channel Islands, south along the coast to Rancho Palos Verdes, into the Los Angeles Basin, and north to the "northern margins of Ventura and Santa Barbara Counties" (Glassow et al. 2007:191).

3.1.1 Paleo-Coastal Tradition (ca. 10,000 – 7000 BCE)

The Paleo-Indian Period, also referred to as the Paleo-Coastal Tradition, defines the earliest human occupation of the Northern Bight, and describes the cultural trends and subsistence strategies of prehistoric populations from approximately 10,000 to 7000 BCE (Glassow et al. 2007). The Paleo-Indian Period in North America is recognized largely by projectile points associated with extinct large mammal remains, such as mammoth, bison, and dire wolves, particularly in the Southwest and Plains regions (Reed 1992; Slaughter et al. 1992; Huckell 1996; Erlandson et al. 2007). These projectile points have been classified as the Clovis style, which exhibit a lanceolate shape with a flute initiated from the base extending as far as the midline (Justice 2002; Hollenshead 2007).

The earliest accepted dates for human occupation in California were recovered from archaeological sites on two of the Northern Channel Islands, located off the southern coast of Santa Barbara County. The earliest radiocarbon dates known for the region, calibrated to approximately 11,000 years before present (B.P.), were derived from human remains and rodent bones recovered from within the same deposits on Santa Rosa Island (Johnson et al. 2002; Erlandson et al. 2007; Glassow et al. 2007). Archaeological deposits from the Daisy Cave site on San Miguel Island establishes the presence of people in this area approximately 10,000 years ago (Erlandson 1991; Erlandson et al. 2007). In San Luis Obispo County, archaeological sites CA-SLO-1764 (Lebow et al. 2001), Cross Creek (CA-SLO-1797; Fitzgerald 2000), and CA-SLO-832 (Jones et al. 2001) yielded radiocarbon dates from approximately 9,000 years ago (Jones and Ferneau 2002).

Recent data from Paleo-Indian sites in southern California indicate the economy was a diverse mix of hunting and gathering, with a major emphasis on aquatic resources in many coastal areas (e.g., Jones and Ferneau 2002; Erlandson et al. 2007). Archaeological deposits at the Daisy Cave site yielded an assemblage of "the oldest known fishhooks in the Americas" (Erlandson et al. 2007:57). Shell middens discovered on the mainland of California have also yielded dates from 8000 to 7000 BCE (Erlandson et al. 2007).

A fluted projectile point fragment was recovered from site CA-SBA-1951 on the Santa Barbara Channel coastal plain (Erlandson et al. 1987; Erlandson 1994). Another fluted projectile point was

reportedly found on the surface in Nipomo, San Luis Obispo County (Mills et al. 2005; Rondeau et al. 2007). Large side-notched projectile points of the Central Coast Stemmed series in this area date to as early as 8,000 years ago (Justice 2002) suggesting some overlap with the Clovis type. Central Coast Stemmed projectile points have been recovered along the Central Coast, which is located immediately north of the Northern Bight region. These sites include Diablo Canyon (CA-SLO-2; Greenwood 1972), Cross Creek (CA-SLO-1797; Fitzgerald 2000), Little Pico Creek (CA-SLO-175; Jones and Waugh 1995), and the Honda Beach site (CA-SBA-530; Glassow 1997), among others. At the Metcalf site (CA-SCL-178), in the southern Santa Clara Valley, Hildebrandt (1983) recovered two large side-notched points associated with charcoal dates ranging from 9,960 to 8,500 years ago.

3.1.2 Millingstone Horizon (ca. 7000 – 5000 BCE)

It is generally accepted human occupation of California originated from small, dispersed occupations during the Paleo-Indian period. Populations increased from the Paleo-Indian Period to the Millingstone Horizon, possibly as a result of an ecological adaptation to collecting plant resources. Rogers (1929) originally identified the Millingstone Horizon along the Santa Barbara Channel. Wallace (1955, 1978) further defined the period, noting the appearance and abundance of milling implements in archaeological sites from this period. The milling implements, including milling stones (e.g., metates, milling slabs) and hand stones (e.g., manos, mullers), are associated with the horizontal motion of grinding small seeds and nuts, and lend to the name Millingstone Horizon (Desautels and Leach 1978; Glassow et al. 2007).

These milling implements are particularly noted in archaeological sites along the coast of California and become even more prevalent near the end of the horizon (Wallace 1955, 1978; Warren 1968; Desautels and Leach 1978). Excavations at the Tank Site (CA-LAN-1) in Topanga Canyon from 1947 to 1948 confirmed the presence of a significant number of milling implements corresponding with the Millingstone Horizon (Treganza and Bierman 1958). Although the milling implements suggest an emphasis on seed and nut gathering, Millingstone populations likely employed a mixed food procurement strategy which included hunting. Flaked stone assemblages, which include crude core and cobble-core tools, flake tools, large side-notched projectile points, and pitted stones (Desautels and Leach 1978; Glassow et al. 2007; Jones et al. 2007), shell middens, and faunal remains in coastal Millingstone Period sites point to broad-spectrum hunting and gathering of shellfish, fish, birds, and mammals. This mixed food procurement strategy demonstrates adaptation to regional and local environments, lending to population increase.

3.1.3 Early Period (ca. 5000 – 2000 BCE)

The Early Period of the Northern Bight is marked by a lower frequency of radiocarbon dated archaeological sites as well as changes in artifact forms. Differences in artifact forms, particularly in ground stone implements, likely represent changes in subsistence (Glassow et al. 2007). The material culture recovered from Early Period sites within the Northern Bight region provides evidence for continued exploitation of inland plant and coastal marine resource as well as the incorporation of “newly important food resources” found in specific habitats (Glassow et al. 2007:197). In addition to the use of metates and manos, prehistoric populations began to use mortars and pestles, such as those recovered from the Sweetwater Mesa (CA-LAN-267) and Aerophysics (CA-SBA-53) sites (Glassow et al. 2007).

Artifact assemblages recovered from Early Period sites also include bipointed bone gorge hooks used for fishing, *Olivella* beads, bone tools, and pendants made from soapstone. The frequency of projectile points in Early Period assemblages also increased, while the style began to change from

lanceolate forms to side-notched forms (Glassow et al. 2007). This projectile point style trend, first identified by David Banks Rogers in 1929, was confirmed by Greenwood (1972) at Diablo Canyon. The projectile point trend has become apparent at numerous sites along the California coast as well as a few inland sites (e.g., CA-SBA-210 and CA-SBA-530). In many cases, manifestations of this trend are associated with the establishment of new and larger settlements, such as at the Aerophysics site (Glassow et al. 2007; Jones et al. 2007).

3.1.4 Middle Period (ca. 2000 BCE – CE 1)

The Middle Period describes a pronounced trend toward greater adaptation to regional or local resources as well as the development of socioeconomic and political complexity in prehistoric populations (Glassow et al. 2007). The remains of fish, land mammals, and sea mammals are increasingly abundant and diverse in archaeological deposits along the coast.

Coastal populations developed shell fishhooks, and projectile points changed from side-notched dart points to contracting stem styles. Flaked stone tools used for hunting and processing—such as large side-notched, stemmed, lanceolate or leaf-shaped projectile points, large knives, edge modified flakes, and drill-like implements—occurred in archaeological deposits in higher frequencies and are more morphologically diversified during the Middle Period. Bone tools, including awls, are more numerous than in the preceding period, and the use of asphaltum adhesive became common. Circular fish hooks which date from between 1000 and 500 BCE, compound bone fish hooks which date between CE 300 and 900, notched stone sinkers, and the tule reed or balsa raft, indicative of complex maritime technology, became part of the toolkit during this period (Kennett 1998; King 1990; Arnold 1995; Jones and Klar 2005; Glassow et al. 2007).

Populations continued to follow a seasonal settlement pattern until the end of the Middle Period; large, permanently occupied settlements with formal architecture, particularly in coastal areas, appear to have been the norm by the end of the Middle Period (Kennett 1998; Glassow et al. 2007). Prehistoric populations began to bury the deceased in formal cemeteries with artifacts which may represent changes in ideology and the development of ritual practices (Glassow et al. 2007).

3.1.5 Middle – Late Transition Period (ca. CE 1 – 1000)

The Middle-Late Transition period is marked by major changes in settlement patterns, diet, and interregional exchange. Prehistoric populations continued to occupy more permanent settlements, with the continued use of formal, though crowded cemeteries, and the burial of goods with the deceased. Burials are normally flexed, placed face down, and oriented toward the north or west (Warren 1968). The interments are typically marked by vertical pieces of whalebone, and have abundant grave goods, such as ornaments, effigies, and utensils.

After CE 500, a wealth of ornaments, ceremonial, and artistic items characterize the Northern Bight "Chumash Tradition" along the central coast and offshore islands (Warren 1968). Ground stone items include bowls, mortars and pestles, balls, grooved stones, doughnut stones, stone beads, pendants, pipes, tubes, and mammal effigies. Projectile points, both large and small, were typically non-stemmed and leaf-shaped, with convex or concave bases. Chipped stone implements also included drills and scrapers. Utilitarian objects were made from bone (e.g., awls, fishhooks, whistles, and tubes) and shell (e.g., fishhooks and abalone shell dishes). Shell beads and ornaments were abundant, bowls, pestles, pipes, and stone tubes were inlaid with shell beads and engraved. Bowls, pipes, and ornaments were commonly manufactured from steatite.

The manufacture of the plank canoe, called *tomol*, allowed coastal prehistoric populations to catch larger fish in deeper waters (Glassow et al. 2007). Following the introduction of the *tomol*, which was lined with naturally occurring asphaltum, populations began to use harpoons, hooks and lines, and nets to catch deep-sea fish and mammals (Van Horn 1979). The plank canoe appears to have influenced "commerce between the mainland coast and the Channel Islands," and fish remains indicate "a noticeable increase in the acquisition of large deep-sea fish such as tuna and swordfish" (Glassow et al. 2007:204).

Projectile points diagnostic of both the Middle and Late periods are found in Northern Bight archaeological sites (Glassow et al. 2007). These projectile points include large, contracting-stemmed types typical of the Middle Period, as well as small, leaf-shaped Late Period projectile points, which likely reflect the introduction of the bow and arrow. Middle-Late Transition Period sites indicate populations replaced *atlatl* (dart) technologies with the bow and arrow, which required smaller projectile points.

Mortars and pestles became more common during this transitional period, gradually replacing manos and metates as the dominant milling equipment. Many archaeologists believe this change in milling stones signals a change from the processing and consuming of hard seed resources to the increasing reliance on acorn (e.g., Glassow et al. 1988; True 1993).

3.1.6 Late Period (ca. CE 1000 – Historic Contact)

Late Period archaeological sites indicate sociopolitical and economic complexity among populations in the Northern Bight. Glassow et al. (2007:205) notes between 1200 and 1300 a social stratification becomes clear archaeologically. Climatic change may have stimulated the development of specialized crafts, regional trade, and changes in food procurement. Unlike the large Middle period shell middens, Late Period sites are more frequently single-component deposits. There are also more inland sites, with fewer and less visible sites along the Pacific shore during the Late Period. The settlement pattern and dietary reconstructions indicate a lesser reliance on marine resources than observed for the Middle and Middle-Late Transition periods, as well as an increased preference for deer and rabbit (Jones 1995). An increase in the number of sites with bedrock mortar features dating to the Late Period suggests nuts and seeds began to take on a more significant dietary role in Late Period populations.

Late Period sites are distinguished by small, finely worked projectile points and temporally diagnostic shell beads. These shell beads were used as monetary currency to trade with inland populations. Trade brought many maritime goods, such as fish, shellfish, and steatite bowls to inland locations, such as CA-SBA-3404, CA-SBA-485, and CA-SBA-2358, particularly during the latter part of the Late Period. Small, finely worked projectile points are typically associated with bow and arrow technology, which is believed to have been introduced to the area by the Takic migration from the deserts into southern California.

3.2 Ethnographic Context

The APE lies within Chumash ethnographic territory, which extends from the current city of Malibu, north beyond San Luis Obispo, and inland as far as 42 miles (Glassow 1996). The Chumash also inhabited the northern Channel Islands. The Chumash spoke six closely related languages, divided into two broad groups – Northern Chumash, consisting of only Obispeño and Southern Chumash, including Purisimeño, Ineseño, Barbareño, Ventureño, and Island Chumash (Mithun 1999). The Chumash are divided into three main groups, including Interior, Coastal, and Northern Channel

Islands Chumash. The coastal Barbareño Chumash referred to themselves as the Wal-wa-ren-na, and "occupied the narrow coastal plain from Point Conception to Punta Gorda in Ventura County" (Grant 1978b:509).

Chumash villages generally ranged between 30 and 200 people, with the largest settlements numbering anywhere from 500 to 800 people (Glassow 1996:14). Grant (1978b) describes a typical Chumash village along the Santa Barbara Channel as consisting of "several houses, a sweathouse, store houses, a ceremonial enclosure, gaming area, and a cemetery usually placed well away from the living area." Archaeological investigations have recognized separate areas within cemeteries for elites and non-elites (King 1969).

Permanent Chumash villages included hemispherical or rounded mud-covered (insulated) pole and thatch dwellings arranged in close groups (Brown 2001). Thatching was made from tule, Carrizo grass, wild alfalfa, and fern (Grant 1978b). Smaller Chumash groups correspondingly occupied short-term special-purpose camps throughout the year to acquire seasonal resources (Glassow 1996). Cooking fires were centered within the dwelling to allow smoke to ventilate through a hole in the roof (Grant 1978b).

The Chumash are well-known for their wooden plank canoe, or *tomol*. The *tomol* facilitated the procurement of marine resources and the trade network between the mainland and the Channel Islands. Sea mammals were hunted with harpoons, while deep-sea fish were caught using nets and hooks and lines. In addition to marine resources, the Chumash subsistence focused on acorns, pine nuts, prickly pear cactus, and other plant resources, and land animals such as mule deer, antelope, quail, dove, and other waterfowl (Brown 2001). The Chumash also manufactured various other utilitarian and non-utilitarian items. Eating utensils, ornaments, fishhooks, harpoons, and other items were made using bone and shell. Olivella shell beads were especially important for trade.

Spanish explorers first arrived in the Santa Barbara Channel region in 1542. Contact had much more of an impact starting in 1770 with the establishment of the missions. Mission life led to severe population decline and culture loss (Johnson 1987). Although the Chumash languages are no longer commonly spoken (Timbrook 1990), many descendants of the Chumash still live in the region and a cultural revitalization has been ongoing since the twentieth century (Glassow et al. 2007). Today, the Santa Ynez Band of Chumash Indians, whose reservation is approximately 72 kilometers (45 miles) northwest of the APE, is the only federally recognized Chumash tribe.

3.3 History

Post-European contact history for the state of California is divided generally into three periods: the Spanish Period (1769–1822), the Mexican Period (1822–1848), and the American Period (1848-present). The following provides a general discussion of the history of California following European contact.

3.3.1 Spanish Period (1769 – 1822)

The Santa Barbara Channel region was first visited by the Cabrillo Expedition in October of 1542 (Chesnut 1993). A second Spanish expedition, consisting of two ships under the command of Sebastian Vizcaino, arrived in the Santa Barbara area in 1602. For more than 200 years, Cabrillo, Vizcaino and other Spanish, Portuguese, British, and Russian explorers sailed the Alta (upper) California coast and made limited inland expeditions, but they did not establish permanent settlements (Bean 1968; Rolle 2003).

The Spanish began to occupy Alta California permanently in the mid eighteenth century. While the Spanish funded expeditions to claim Alta California for the Spanish government, Franciscan missionaries traveled to proselytize and convert the local populations to Catholicism. Gaspar de Portolá established the first Spanish settlement, a military fort named El Presidio Reál de San Diego in May 1769. The Spanish established El Presidio de Santa Bárbara, the fourth and final presidio in 1782. Initially a temporary palisade structure, construction of a permanent adobe structure began in 1788 (National Park Service n.d.).

Franciscan Father Junípero Serra founded Mission San Diego de Alcalá in June 1769, the first of 21 missions founded by the Franciscans in the late eighteenth and early nineteenth centuries. Mission San Buenaventura was founded in 1782 and Mission Santa Barbara, was founded in 1786. The Chumash living near the project APE came under the control of the Spanish at both of these missions (Weber 1992). The Spanish relied on Chumash labor to construct the buildings, dam, and aqueduct systems.

Mission life led to severe population decline and culture loss among the Chumash. The Spanish brought with them diseases for which the Chumash had no immunity. Living and working in close proximity spread diseases throughout the native populations and killed many. The Spanish also introduced domestic plants and animals for labor and food. These non-native species vastly altered the landscape, forcing the Chumash to adopt new foods and lifeways.

3.3.2 Mexican Period (1822 – 1848)

Mexico's revolution against Spain achieved success in 1821. News of the victory reached California in 1822, marking the beginning of the Mexican period. The hallmarks of the Mexican period are the secularization of the missions, completely accomplished by 1836, and a greater distribution of private land grants to prominent citizens, including retired military personnel. The Secularization Act of 1833 enabled Mexican governors in California to distribute former mission lands to individuals in the form of land grants. "The intention of the secularization of the California missions in 1834 was to transform the mission centers into Pueblos; the Indians, with their knowledge of trade and agriculture, would become Mexican citizens in these Pueblos," Grant (1978a:507) explains. Mexican governors made more than 700 land grants between 1833 and 1846, putting most of the state's lands into private ownership for the first time (Shumway 2007). Approximately forty land grants were issued in present-day Santa Barbara County and nineteen in present-day Ventura County, where ranching and agriculture were prevalent during this period (Beck and Haase 1974; Tompkins 1976, 1987; Chesnut 1993). Much of the project's APE is located within Rancho El Rincon, granted to Teodoro Arrellanes in 1835 and patented to him in 1872 (County of Santa Barbara 2011).

3.3.3 American Period (1848 – Present)

The discovery of gold in northern California in 1848 led to the California Gold Rush, despite the first California gold being discovered in Placerita Canyon in 1842 (Guinn 1915). Southern California remained dominated by cattle ranches in the early American period, though droughts and increasing population resulted in farming and a growth in urban professions which increasingly supplanted ranching through the late nineteenth century. By 1853, the population of California exceeded 300,000. Thousands of settlers and immigrants continued to immigrate into the state, particularly after the completion of the transcontinental railroad in 1869.

The American Period officially began with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico $15 million for the conquered territory of California,

Nevada, Utah, and parts of Colorado, Arizona, New Mexico, and Wyoming. In 1850, several months before California was admitted as the 31st state, the County of Santa Barbara was incorporated. Subsequently, Ventura County formed and separated from Santa Barbara County in 1873. The boundary between the counties generally spans north from Rincon Point east of current day Carpinteria city limits.

3.3.4 Santa Barbara and Ventura Counties

Santa Barbara County, originally including the area which would eventually become Ventura County, was created in 1850 as one of the original twenty-seven counties within the state of California (California State Association of Counties 2014). At the time, less than twenty percent of Santa Barbara's population was Anglo and many of these residents had learned to speak Spanish, converted to Catholicism, and married into the old *Californio* families (Redmon 2009). The streets of the city of Santa Barbara were laid out in 1851 (City of Santa Barbara 2016) and cattle ranching continued to thrive in the region. A catastrophic drought during 1863 and 1864 ruined grazing lands and led to many rancheros losing or selling off their land, providing additional property for a growing population.

South of Santa Barbara, the town of Carpinteria was established in 1863 at the edge of the salt marsh near Santa Monica Creek. Residents of Santa Barbara were attracted to the area and passed their summer months there. San Buenaventura (Ventura) County was formed and separated from Santa Barbara County in 1873. Both counties supported agricultural uses and oil exploration, and crops such as walnuts, beans and citrus were successful in the region (Ventura Centennial Corporation 1966). The Southern Pacific Railroad arrived in the region in 1887, which further advanced tourism and relocation to the area. The California land speculation boom affected both Santa Barbara and Ventura in the late 1880s (City of Santa Barbara 2016; Triem 1985). Wealthy visitors were drawn to the Santa Barbara area by the beautiful scenery, climate, and establishments catering to them (Graffy 2010). Additionally, a new town site for Carpinteria was laid out in 1887; however, the town grew in a slower manner (Scott 1992). Asphalt was naturally found in Carpinteria and was commercially mined. At the turn of the century Ventura County gained fame for the development of a large sugar factory built in what is today Oxnard, a speculative venture relying on farmers switching thousands of acres of crops to the cultivation of sugar beets.

A major earthquake in 1925 damaged or destroyed many structures throughout Santa Barbara County, and resulted in a major rebuilding effort in which the City of Santa Barbara adopted a unified Spanish-style architectural appearance. The cities in the region continued to grow and development expanded outwards over the following decades, bolstered by oil fields, increased agricultural production, and post-war population and business growth.

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4 Background Research

Background research for the cultural resources assessment included record searches, a review of historical maps and aerial photographs, Native American outreach, and historical group consultation. A summary of findings of each of these efforts is provided below.

4.1 Cultural Resources Record Search

On May 10, 2019, Rincon conducted a search of the California Historical Resources Information System at the Central Coastal Information Center (CCIC) located at University of California, Santa Barbara; the CCIC search encompassed the portion of the APE located in Santa Barbara County. On May 14 and June 12, 2019, Rincon conducted searches for the Ventura County portion of the project at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton. On August 30, 2022, Rincon completed a search of the SCCIC for additional project components (Rincon Vent 1 and Vent 2) that were not included in the original records search. The searches were conducted to identify previously recorded cultural resources and previously conducted cultural resources studies within the APE and a 0.5-mile radius surrounding it. The literature review also included a review of the NRHP, the CRHR, and the Historic Resources Inventory.

4.1.1 Previous Studies

The CCIC and SCCIC records searches (2019 and 2022) identified a total of 30 previously conducted cultural resources studies within a 0.5-mile radius of the APE (Table 1). Ten of these studies encompassed portions of the APE and are detailed below. Non-confidential record search information is provided in Appendix A.

Table 1 Previous Cultural Resources Studies within 0.5 Mile of the APE

Report Number	Author	Year	Title	Relationship to APE
SR-00579	–	–	*Report not on file at the CCIC*	Outside
SR-00607	Waldron, W.	1983	*Negative Archaeological Survey Report, Bridge No. 51-140, Rincon Creek*	**Within**
SR-01154	Waldron, W.	1986	*Archaeological Survey Report for Proposed Bridge Replacement and Road Realignment Project*	**Within**
SR-01223	Santoro, L.	1990	*A Phase I Cultural Resources Investigation for the Proposed Santa Barbara South Coast Emergency Water Delivery System*	Outside
SR-01224	Santoro, L.	1991	*Phase I Archaeological Reconnaissance of Casitas Pass Road, Santa Barbara County, California*	**Within**
SR-01228	Santoro, L. and G. Toren	1992	*Phase I Archaeological Reconnaissance on Casitas Pass Road (State Highway 192), Santa Barbara County, California*	Outside
SR-01419	Peak, Ann S., Melinda A.Peak, Robert A. Gerry, and Neal J. Neuenschwander	1992	*Consolidated Report: Cultural Resources Studies for the Proposed Pacific Pipeline Project*	**Within**
SR-01448	Neuenschwander, Neal J. and James R. Oglesby	1991	*Class III Cultural Resource Assessment of the Proposed Carpinteria and Southern Re-Routes, Santa Barbara, Ventura, and Los Angeles Counties, California*	**Within**
SR-01924	Wilcoxon, Larry R.	1996	*A Cultural Resource Evaluation for the Twin Pines Ranch Parcel (APN 001-190-06), in Conjunction with the Proposed Development of a Corporate Headquarters and Research and Development Campus for QAD, Inc., Santa Barbara County, California*	Outside
SR-02102a	Pierson, Larry, Gerald Schiller, and Richard Slater	1987	*Archaeological Resource Study: Morro Bay to Mexican Border: Final Report*	Outside
SR-2102b	Pierson, Larry, Gerald Schiller, and Richard Slater	1987	*Archaeological Resource Study: Morro Bay to Mexican Border: Final Report Appendices (Prehistoric Sites)*	Outside

Report Number	Author	Year	Title	Relationship to APE
SR-2102c	Pierson, Larry, Gerald Schiller, and Richard Slater	1987	*Archaeological Resource Study: Morro Bay to Mexican Border: Final Report Appendices (Prehistoric Sites)*	Outside
SR-02116	Stone, David	1998	*Archaeological Assessment for Residential Improvements to 7450 Shepard Mesa Road, Carpinteria, California*	Outside
SR-02622	Stone, David	2000	*Phase I Archaeological Resources Report:6580 Gobernador Canyon Drive, Carpinteria, California*	Outside
SR-03016	Stone, David and Leeann Haslouer	2003	*Phase I Archaeological Resources Report: Proposed Lot Split 6977 Shepard Mesa Drive, Santa Barbara County, California*	Outside
SR-03095	Carbone, Larry A.	2003	*A Phase I Archaeological Resources Report for Proposed Construction of a Swimming Pool, 7498 Shepard Mesa Drive, Carpinteria, Santa Barbara County, California*	Outside
SR-04097	Stone, David	2007	*Phase I Archaeological Resources Report, 6404 Via Real, Carpinteria Area, Santa Barbara County*	Outside
SR-04574	Wee, Stephen and Bryan Larson	2006	*Historical Resources Evaluation Report: Masonry Features within State Right-of-Way along SR 192, Santa Barbara County, California*	**Within**
SR-05060	Switalski, Hubert and Andrea Bardsley	2012	*Cultural Resources Study for The Proposed Southern California Edison Company's Santa Barbara County Reliability Project, Santa Barbara and Ventura Counties, California*	Outside
SR-05270	Maki, Mary	2016	*Negative Archaeological Survey Report of Approximately 0.2 Acre for the 6769 Rincon Road Barn Project, Unincorporated Santa Barbara County, California*	Outside
VN-00138	Brandoff, Joan	1974	*Archaeological Survey Report on Willow Creek Ridge Fuel Break and Santa Ana Ridge Fuel Break*	Outside
VN-00426	MacFarlane, Heather	1983	*Cultural Resources Survey: Energetics' Proposed Oil Pipeline Route, Rincon Del Mar Ranch, Ventura County, California*	**Within**
VN-00636	Lopez, Robert	1981	*An Archaeological Reconnaissance of the Area Involved in a Proposed Oil Well Drill site on Rincon Del Mar Ranch Ventura County, California*	Outside
VN-00679	Lopez, Robert	1985	*An Archaeological Reconnaissance of the Area Involved in a Proposed Parcel Division, Parcel Map Waiver Number 105, at the Eastern End of Casitas Valley, Ventura County, California*	Outside

Report Number	Author	Year	Title	Relationship to APE
VN-01334	Dillon, Brian D.	1990	*Archaeological Assessment of Ten Proposed Alternative Locations for Facilities Expansion of the Casitas Municipal Water District, Ventura County, California*	**Within**
VN-01731	Unknown	1990	*Historic Property Survey Report Rincon Creek Bridge Replacement and Realignment*	Outside
VN-02298	Jordan, Stacey C. and Theodore G. Cooley	2006	*Archaeological Survey Report for the Southern California Edison Company Replacement of 18 Deteriorated Poles on the Santa Barbara- San Marcos-Vegas 66kv, Storke 16kV, Fox 4kV, Braemer 4kV, Dorrance 4kV, Carpoil 16kV, Seacliff 16kV, and Copy 16kV Circuits*	Outside
VN-02791	Wlodarski, Robert	2008	*A Phase I Archaeological Study for a Parcel Map Waiver for 7032 Casitas Pass Road, County of Ventura, California*	**Within**
VN-02804	Bruce, BranDee and Amy J. Barnes	2008	*Cultural Resource Investigation of the Casitas Dam-Tenders House Replacement Project, Ventura County, California*	Outside
VN-03064	Switalski, Hubert and Andrea Bardsley	2012	*Cultural Resource Study for the Proposed Southern California Edison Company's Santa Barbara County Reliability Project, Santa Barbara and Ventura Counties, California*	**Within**

Sources: Central Coastal Information Center 2019; South Central Coastal Information Center 2019, 2022

4.1.1.1 SR-00607

Report SR-00607 is a negative survey report conducted by Wendy Waldron in 1984 for Caltrans for the proposed replacement of bridge No. 51-140. The survey was conducted on portions of SR 150 near Rincon Creek. The study did not result in the identification of cultural resources within the current project's APE.

4.1.1.2 SR-01154

Report SR-01154 is a positive survey report conducted by Wendy Waldron in 1986 for Caltrans for the proposed realignment of 0.8 mile of SR 150. The survey resulted in the identification of one archaeological site, a bedrock boulder with two mortars, which is located outside of the current project's APE.

4.1.1.3 SR-01224

Report SR-01224 is a positive survey report conducted by L. Santoro and G. Toren in 1991 for Environmental and Energy Services Company (ERCE) on behalf of the Southern California Gas Company for proposed gas pipeline maintenance along State Highway 192. The survey resulted in the identification of one historic-era isolated find, a 1927 land survey marker, which is located outside of the current project's APE.

4.1.1.4 SR-01419

Report SR-01419 is a cultural resources study conducted by Peak & Associates in 1992 on behalf of Pacific Pipeline System, Inc. for the proposed construction of approximately eleven linear miles of crude oil pipeline between Sea Cliff and Ventura. The study did not result in the identification of cultural resources within the current project's APE.

4.1.1.5 SR-01448

Report SR-01448 is a cultural resources study conducted by Peak & Associates in 1992 on behalf of Pacific Pipeline System, Inc. for the proposed construction of approximately seven linear miles of crude oil pipeline between Serena and Carpinteria. The study did not result in the identification of cultural resources within the current project's APE.

4.1.1.6 SR-04574

Report SR-04574 is a historic resources evaluation report conducted in 2006 by JRP Historical Consulting on behalf of Caltrans. The proposed project was for minor repairs to U.S. Highway 101 in Santa Barbara County. The study provides an overview of resource P-42-003622 (Highway 192), which intersects with portions of the current project's APE (see resource description in Section 4.1.2.1).

4.1.1.7 VN-00426

Report VN-00426 is a positive survey report conducted in 1983 by McClelland Engineers, Inc. on behalf of Clawson Petroleum Consultants for proposed oil pipeline installation within the Rincon Del Mar Ranch adjacent to SR 150. The survey resulted in the identification of one prehistoric

archaeological site, consisting of one intact mano and several mano fragments, which is located outside of the current project's APE.

4.1.1.8 VN-01334

Report VN-01334 is a negative survey report conducted by B. Dillon in 1990 on behalf of Consulting Engineers, Inc. for proposed Casitas pipeline facilities near Lake Casitas. The study did not result in the identification of cultural resources within the current project's APE.

4.1.1.9 VN-02791

Report VN-02791 is a negative survey report prepared in 2008 by the Historical, Environmental, Archaeological, Research Team on behalf of Water Resource Engineering Associates for a proposed development project in Ventura County. The study did not result in the identification of cultural resources within the current project's APE.

4.1.1.10 VN-03064

Report VN-03064 is a cultural resources study conducted by AMEC Environment and Infrastructure, Inc. in 2012 for the reconstruction, maintenance, and installation of SCE transmission line facilities within approximately 1,000 acres of Ventura and Santa Barbara counties. The study did not result in the identification of cultural resources within the current APE.

4.1.2 Recorded Resources

The CCIC and SCCIC records searches (2019 and 2022) identified 13previously recorded cultural resources within a 0.5-mile radius of the APE (Table 2). These include five historic-era built-environment resources, five prehistoric archaeological sites, one historic-era isolated artifact, and one prehistoric isolated artifact. Of those resources, three historic-era built-environment resources, SR 192 (P-42-003622), Abbott Ranch (P-56-152756), and the Santa Clara-Ojai-Santa Barbara 66kV Transmission Line (P-56-153060), extend into the project APE. A description of these three resources is provided below.

Table 2 Previously Recorded Cultural Resources within 0.5 Mile of the APE

Primary Number	Trinomial	Resource Type	Description	Recorder(s) and Year(s)	NRHP/CRHR Status	Relationship to APE
P-42-000002	CA-SBA-2	Prehistoric Site	Habitation Site	1929 (Rogers, David Banks); 1968 (Spanne, Larry)	Unknown	Outside
P-42-000003	CA-SBA-3	Prehistoric Site	Habitation Site	1929 (Rogers, David Banks); 1968 (Spanne, Larry)	Unknown	Outside
P-42-000112	CA-SBA-112	Prehistoric Site	Habitation Site	1924 (Elsasser, A.B.)	Unknown	Outside
P-42-003622	CA-SBA-3622H	Historic Structure	State Route 192	1999 (Darcangelo, M.); 2005 (Larson, B., A. Walters and A. Rischel)	NRHP and CRHR ineligible	**Within**
P-42-038672	CA-SBA-38672	Prehistoric Isolate	Lithic flake	1999 (Darcangelo, M.and S. Mikesell)	NRHP and CRHR ineligible	Outside
P-42-040653	CA-SBA-40653H	Historic Structure	Bridge	1999 (Pursell, C.)	NRHP and CRHR ineligible	Outside
P-56-000112	CA-VEN-112	Prehistoric Site	Lithic Scatter and Burial	1959 (Landberg, Leif and Dick Peirce)	Unknown	Outside
P-56-000113	CA-VEN-113	Prehistoric Site	Habitation Site	1959 (Landberg, Leif)	Unknown	Outside
P-56-100391	–	Historic Isolate	Refuse Can	2014 (Leftwich, B.)	NRHP and CRHR ineligible	Outside
P-56-152756	–	Historic Buildings, Structure, and Objects	Abbott Ranch	1990 (Scott, Gloria)	Recommended NRHP and CRHR ineligible	**Within**
P-56-152844	–	Historic Building	Dam-Tender's House	2008 (Bruce, Brandee)	Recommended NRHP and CRHR ineligible	Outside
P-56-153060	–	Historic Structure	Transmission Line	2012 (Tinsley Becker, Wendy L.)	Recommended NRHP and CRHR ineligible	**Within**

Sources: Central Coastal Information Center 2019 and South Central Coastal Information Center 2019

4.1.2.1 State Route 192 (P-42-003622)

First documented in 1999 by M. Darcangelo, SR 192 (P-42-003622) is an historic-period, secondary state highway designed to serve local traffic in the foothills above the Santa Barbara coastline. SR 192 traverses west to east for 21 miles from its intersection with Highway 154 in Santa Barbara through Montecito and Carpinteria before terminating at its intersection with SR 150 near the Santa Barbara/Ventura County line. Darcangelo's initial site record includes an overview of the history of the alignment, including its construction in 1926 and 1933 adoption into the State Highway System. The resource was recommended NRHP and CRHR ineligible when its record was last updated (Larson et al. 2005).

4.1.2.2 Abbott Ranch (P-56-152756)

Abbott Ranch (P-56-152756) is an historic-period ranch located at the western edge of Ventura County, slightly east of the city of Carpinteria. Documented in 1990 by Gloria Scott on behalf of Caltrans, the original portion of the main residential building was constructed in 1876. Scott's evaluation includes a description of several outbuildings, a barn, a foreman's cottage, and extensive landscaping throughout the property. Historically, the property was a walnut ranch, but transitioned to lemon and avocado orchards by the 1920s. At the time of Scott's evaluation, two-thirds of the ranch was devoted to growing avocados and the remaining third to lemons. The resource was recommended ineligible for the NRHP and CRHR; however, Scott noted the Ventura County Cultural Heritage Board believed the Abbott Ranch met the criteria for local designation (Scott 1990a).

4.1.2.3 SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line (P-56-153060)

The SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line (P-56-153060) is an historic-period transmission line spanning approximately 34 miles from the Santa Clara to Santa Barbara Substations. Documented in 2012 by Wendy Becker, construction of the line and associated infrastructure began in 1932. The line was upgraded from 60kV to 66kV in 1956, and various modifications subsequently occurred throughout the 1960s and 1970s. Becker's evaluation includes a description of steel lattice towers, tubular steel poles, and wooden poles. The resource was recommended ineligible for the NRHP and CRHR (Becker 2012).

4.2 Historical Imagery Review

A review of historical aerial photographs indicates much of the area had been developed for agricultural purposes by 1947. Many of the roads located within the APE east of Carpinteria had also been constructed by the mid-1900s. The aerials also confirm the presence of SR 192, Abbott Ranch, and the SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line in 1947 (Nationwide Environmental Title Research, LLC [NETR online] 2019).

4.3 Native American Outreach

Rincon contacted the Native American Heritage Commission (NAHC) on May 10, 2019, to request a Sacred Lands File (SLF) search of the APE. As part of this request, a list of Native American groups and/or individuals culturally affiliated with the area who may have knowledge of cultural resources within the APE was requested from the NAHC. The NAHC responded on June 3, 2019, stating the

results of the SLF search were negative with instructions to contact the relevant local Native American groups (Appendix B).

On June 18, 2019, letters were sent to ten NAHC listed contacts. Follow up calls were conducted on July 1, 2019.

On April 7, 2021, Mr. Patrick Tumamait of the Barbareño/Ventureño Band of Mission Indians responded to Casitas and inquired if a Phase I archaeological resources report had been prepared for the project. Mr. Tumamait was provided a copy of the Phase I report.

As the project elements have been modified, updated Native American consultation letters will be sent to the ten NAHC contacts for the purposes of Section 106 compliance. As of the submittal of this report, updated letters have not yet been sent. Follow-up calls regarding the updated project have not yet been completed. As the CEQA lead agency, Casitas is also conducting Native American consultation for the project in compliance with Assembly Bill 52.

4.4 Local Historic Consultation

On June 18, 2019, letters were sent to three local historic groups to request input on potential or known historic resources within the APE or vicinity (Appendix B). These groups include the Carpinteria Valley Historical Society/Museum of History, the Gledhill Library at the Santa Barbara Historical Museum, and the City of Carpinteria Community Development Department. Follow up consultation calls were conducted on July 3 and July 10, 2019, for the purposes of Section 106 compliance. As the project elements have been modified, updated letters will be sent to the three local historical groups for the purposes of Section 106 compliance. As of the submittal of this report, updated letters have not yet been sent. Follow-up calls regarding the updated project have not yet been completed.

On June 20, 2019, Steve Goggia, Director of the City of Carpinteria Community Development Department, responded via email and stated the City had no comment other to call attention to the fact that archaeological sites are scattered throughout the area. Mr. Goggia recommended consulting with the CCIC.

On July 10, 2019, David Griggs, Director/Curator of the Carpinteria Valley Museum of History and Carpinteria Valley Historical Society responded via telephone and stated that he did not have any major concerns regarding cultural resources at this time. Mr. Griggs requested a more detailed figure to understand the project better, specifically in the area of Abbott Ranch. Mr. Griggs was informed that since the time the initial consultation letters were mailed, the proposed pipeline alignment was moved to the north and further away from the farm buildings per Mr. Abbott's request. An updated figure was emailed to Mr. Griggs showing the most recent proposed project elements in the vicinity of Abbott Ranch.

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5 Field Survey

5.1 Methods

On May 21, 2019, Archaeologist Mary Pfeiffer performed a field survey of the APE. On June 5, 2019, Ms. Pfeiffer and Architectural Historian Susan Zamudio-Gurrola, MHP, performed a follow-up field survey of the APE, including areas on private property inaccessible during the initial survey. On June 14, 2019, Archaeologist Peter Pham and Ms. Zamudio-Gurrola performed an additional follow-up field survey of the APE, including areas added to the APE by Casitas following the first two surveys. On June 29, 2022, Ms. Pfeiffer conducted an additional field survey of new or relocated project components added by Casitas after the first three surveys, which included BPS-A, BPS-B and associated staging area, balancing tanks, Limited Rincon Main, connection to Rincon Main, Rincon Pump Plant and Rincon Vent 1 and 2. Ms. Pfeiffer visually inspected the buildings and structures to identify and document any potential character-defining features. The balancing tanks were photographed and recorded by Ms. Pfeiffer and later inspected by Architectural Historian, James Williams, MA, for notable architectural elements and alterations and to assess overall condition and integrity. The APE was surveyed using a combination of windshield and pedestrian survey methods to fully examine all exposed ground surface and document conditions.

Ms. Pfeiffer and Mr. Pham carefully examined all areas for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), ecofacts (marine shell and bone), soil discoloration potentially indicative of the presence of a cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramics). Ground disturbances such as burrows and drainages were also visually inspected. Transect spacing throughout the exposed surfaces of the APE was no more than 15 meters. Field notes of survey conditions and observations were recorded using Rincon field forms and a digital camera. Copies of the original field notes and photographs are maintained at the Rincon Ventura office.

Ms. Zamudio-Gurrola conducted the built-environment survey, the purpose of which was to identify and photograph built-environment resources in the project APE (including the three previously identified resources), and to evaluate them for historic significance. The survey consisted of a visual inspection of built-environment features, including buildings, structures and associated features, to assess their overall condition and integrity, and to identify and document any potential character-defining features. Ms. Zamudio-Gurrola documented the field survey using field notes and digital photographs. Copies of both are maintained at the Rincon Ventura office.

5.2 Archaeological Survey Results

A majority of the APE is disturbed from agricultural use, underground utility installation, is within and adjacent to existing roadways or has been previously developed. Overall, ground visibility was poor (approximately 10 to 20 percent) as much of the alignment is paved, graded, or obscured by gravel, vegetation, mulch, and leaf litter (Figure 12 through Figure 15. In areas along the alignment where ground visibility was low due to organic matter, boots scrapes were conducted approximately every 20 meters to improve surface visibility and survey reliability. Areas of exposed ground surface were observed at Abbott Ranch, BPS-B and associated central staging area, alignment from HDD entry point to BPS-A, Rincon Main, and Rincon Vents 1 and 2. The alignment in

the area of Abbott Ranch traverses existing graded dirt roadways, as well as lemon and avocado orchards. Exposed soils on the ranch property consisted of a medium-brown fine-grained silty loam. BPS-B and the associated central staging area were primarily open space bisected by an unnamed dirt road (Figure 16). Exposed soil is this area, as well as along the alignment from the HDD entry point to BPS-A was a light brown very fine-grained silt. Visible soils at the Rincon Main were consistent with those observed at Abbott Ranch. Rincon Vents 1 and 2 were located within open space and the soils consisted of a light brown/yellow very fine-grained silt (Figure 17). All areas of the APE showed signs of having been disturbed from either extensive agricultural activities, existing infrastructure, grading, or roadway construction and maintenance. No archaeological materials were identified during the field survey.

Figure 12 Portion of Casitas Pass Road in the APE, View Southeast

Figure 13 Unnamed Paved Roadway East of Avocado Hill Road in APE, View Northeast

Figure 14 Portion of Avocado Hill Road in the APE, View East

Figure 15 Ground Visibility Within Agricultural Areas, View East

Figure 16 Central Staging Area to BPS-B, View South

Figure 17 Rincon Vent 1 and Vent 2 Open Space Area, View North

5.3 Built Environment Survey Results

Two newly identified historic-period built-environment resources, the Rincon Chlorination Station and the Rincon Pump Plant, were observed during the surveys within the project's APE. In addition, sections of three previously recorded historic-period built environment resources were identified within the project's APE. Those sections were resurveyed, and their evaluations were updated to confirm their eligibility status. Descriptions of the two newly identified resources and three previously recorded resources are provided below. Department of Parks and Recreation forms are provided in Appendix C.

5.3.1 Rincon Chlorination Station

Architectural Description

The property is located at the southwest corner of the intersection of SR 150 and Red Mountain Road. The property contains a one-story structure sited above the road grade and surrounded by chain link fencing. Constructed of concrete block, the structure has a nearly square footprint and a flat roof with a wide overhang. Roofing material was not clearly discernible. Fenestration includes metal sash windows on the east and west elevations. Entries on the south elevation include a single metal door with one panel below glazing, and a roll-up metal garage door. All glazing is covered by metal security screens. A small metal lattice tower is located adjacent to and south of the building. The building is surrounded by gravel, and remnants of a small concrete drainage ditch are located to the northwest of the building draining down to SR 150 (Figure 18 and Figure 19).

Property History

Based on the limited available records and aerial photographs, the Rincon Vent Building was constructed circa 1960, and housed one of the chlorination stations within Casitas' larger system (Casitas Municipal Water District 1960; Aranda 2019).

The western portion of Ventura County has struggled with water shortages since the early 1900s. As the region's population and agricultural industry grew, the city of Ventura and the Ojai Valley (which were major areas of growth) relied on diversion of river flows or groundwater pumping to satisfy water demand. However, by the 1930s drought conditions led to an increased concern for the reliability of the water supply. Subsequently, in 1952, the Ventura River Municipal Water District was formed. The following year the United States Department of the Interior, Bureau of Reclamation completed reconnaissance-level studies of western Ventura County's water supply and water requirements. This led to the development of the Ventura River Project, which was completed in 1959 and included the Casitas Dam and Reservoir (Lake Casitas), the Robles Diversion and Canal on the Ventura River, and a water distribution system (Casitas Municipal Water District 2016). The Ventura River Municipal Water District was renamed in 1971 to Casitas Municipal Water District. Presently, Casitas manages a system consisting of Lake Casitas, approximately 97 miles of main and distribution pipelines, nine pumping plants, four chlorination stations, fourteen steel reservoirs, and a pressure filtration treatment plant developed in 1995 (Casitas Municipal Water District 2016). Once the filtration treatment plant was completed and became fully operational in 1997, the subject building discontinued being used for chlorination (Casitas Municipal Water District 2005; Aranda 2019).

Figure 18 Rincon Chlorination Station, View North

Figure 19 Rincon Chlorination Station, View Southwest

Evaluation

The Rincon Chlorination Station is recommended ineligible for listing in the NRHP or CRHR. It is one of several chlorination stations once utilized by Casitas as part of its larger system which includes numerous buildings, engineering structures and associated infrastructure. Archival research did not indicate this individual structure was a key or indispensable part of the water treatment and distribution system; it did not play any significant role in the system. The property, therefore, is recommended ineligible for listing in the NRHP and CRHR under Criteria A/1. Archival research did not uncover any associations with persons important to national, state or local history; thus, the property is recommended ineligible under Criteria B/2. Constructed with utilitarian materials and with no particular architectural style, the structure is a ubiquitous, industrial-type structure very similar, if not identical, to other buildings and structures in Casitas' water treatment and distribution system. Therefore, the property is not eligible under Criteria C/3 as it does not embody the distinctive characteristics of a type, period, region or method of construction, nor does it represent the work of a master or possess high artistic values. It also does not appear to represent a significant and distinguishable entity whose components may lack individual distinction. There is no information to indicate the property has the potential to yield information important in prehistory or history, and therefore is recommended ineligible under Criteria D/4. Lastly, there is no evidence to suggest the Rincon Chlorination Station could be a contributor to a potential historic district as part of the Casitas water system. For the same reasons above, the property is also recommended ineligible under local designation criteria.

5.3.2 Rincon Pump Plant

Architectural Description

The Rincon Pump Plant is located near the southeastern edge of Lake Casitas. The property has a complex of buildings and structures which includes a one-story building, an above-ground concrete basin edged with a metal pole railing and metal staircase, a raised cylindrical tank, additional infrastructure mounted on a concrete pad, a grooved-metal-panel shed, and various chain link fences enclosing portions of the facility. Constructed with concrete block, the building has a nearly square footprint and a flat roof with a wide overhang. Fenestration includes four-light, metal sash windows. One of the windows appears to have had glazing replaced with a slatted vent. A roll-up metal garage door, single metal entry door with one panel below glazing, and a horizontally-slatted vent are also located on the south elevation. A similar single metal door is located on the west elevation (Figure 20 and Figure 21).

To the southeast of the pumping plant complex is a small one-story, concrete block building and an adjacent open shed covering chemical tanks. Slightly further to the east is an open shed sheltering infrastructure of an unknown function, and a large, cylindrical, covered tank.

Figure 20 Rincon Pump Plant, View North

Figure 21 Rincon Pump Plant Infrastructure, View Northwest

Property History

Plans for the Rincon Pump Plant were drawn in mid-1957; it was also developed as a part of the larger Ventura River Project completed in 1959. Presently, Casitas manages a system consisting of Lake Casitas, approximately 97 miles of main and distribution pipelines, nine pumping plants, four chlorination stations, fourteen steel reservoirs, and a pressure filtration treatment plant developed in 1995 (Casitas Municipal Water District 1957 and 2016).

Evaluation

The Rincon Pump Plant is recommended ineligible for listing in the NRHP or CRHR. It is a component of Casitas' larger water treatment, storage and distribution system, which includes numerous buildings, engineering structures and associated infrastructure. The Rincon Pump Plant is one of nine pumping plants in the system (Casitas Municipal Water District 2016). Archival research did not indicate this particular pumping plant individually played a significant role in the overall system. In comparison to other Casitas facilities, the subject pumping plant is not instrumental or a significant feat of engineering. The property, therefore, is recommended ineligible for the NRHP and CRHR under Criteria A/1. Archival research did not uncover any associations with persons important to national, state or local history; thus, the property is recommended ineligible under Criteria B/2. Constructed with utilitarian materials and with no particular architectural style, the building and associated infrastructure are ubiquitous, industrial-type structures. The flat-roofed concrete block building is very similar, if not identical, to other buildings in Casitas' water treatment and distribution system such as the previously described Chlorination Station. Therefore, the subject property is not eligible under Criteria C/3 as it does not embody the distinctive characteristics of a type, period, region or method of construction, nor does it represent the work of a master or possess high artistic values. It also does not appear to represent a significant and distinguishable entity whose components may lack individual distinction. There is no information to indicate the property has the potential to yield information important in prehistory or history, and therefore is recommended ineligible under Criteria D/4. Lastly, there is no evidence to suggest the Rincon Pump Plant could be a contributor to a potential historic district as part of the Casitas' water system. For the same reasons above, the property is also recommended ineligible under local designation criteria.

5.3.3 State Route 192 (P-42-003622)

Architectural Description

A segment of SR 192 (also known as Foothill Road and Casitas Pass Road) is located in the APE. The segment spans from SR 150 on the east to approximately 0.25 mile south of Shepherd Mesa Road on the west (Figure 22). In its entirety, SR 192 comprises a 21-mile long highway running through Santa Barbara County (Larsen et. al 2005).

Figure 22 Portion of SR 192 (P-42-003622) in APE, View Southwest

Property History

SR 192 was created in 1933 from various county roads and passes through the communities of Carpinteria, Montecito, Santa Barbara and Goleta. It acquired the nickname "Foothill Road" as early as the turn of the nineteenth century. As secondary highway serving local traffic, it follows an alignment acquired and developed over a nearly 60-year period (Larsen et. al. 2005).

Evaluation

SR 192 was previously documented in 1999 and 2005 (Darcangelo and Mikesell 1999; Larson et al. 2005). Larson et al. (2005) found the highway had lost much of its integrity, only retaining integrity of location and setting. The resource was recommended ineligible for NRHP, CRHR, and local designation through survey evaluation. In addition, the historic-period highway-related stone masonry features along SR 192 (including bridges, retaining walls, culverts, and a tree well) were also found to not meet the criteria for listing in the NRHP as a historic district (Larsen et al. 2005).

Rincon documented the portion of SR 192 in the APE as part of the field survey effort (Figure 22). Results of the survey indicate the portion of the highway in the APE appears largely as it did at the time of its last evaluation. No information was obtained during the survey to suggest the property would now be eligible for listing in the NRHP, CRHR, or for local designation.

5.3.4 Abbott Ranch (P-56-152756)

Abbott Ranch consists of a 52.3-acre ranch which includes the main residence, barn, garage, foreman's residence, guest house, studio, various ancillary buildings and sheds, and avocado and lemon orchards (Figure 23 through Figure 31). Rincon Road cuts through the northwest end of the

ranch, making the property a discontinuous parcel. The various architectural elements comprising the resource are described below.

Figure 23 Abbott Ranch (P-56-152756) Overview, View Southeast

Architectural Description

Main Residence

The circa 1876 main residence was constructed originally as a two-story, cross-gabled, vernacular farmhouse with a cruciform plan (Figure 24). The home was essentially doubled in size through additions on the south side of the house and wrapping around the north and east sides of the house.

Figure 24 Main Residence, North and West Elevations, View Southeast

Foreman's Residence

A gable-roofed, single-story foreman's residence is located northeast of the main residence. Built in 1935, it is vernacular in style with a gabled-roofed entry porch, wood siding, and wood-sash double-hung windows. It was later altered through a small addition on the rear elevation and a circa 1950s shed-roofed addition on the east elevation (Figure 25).

Figure 25 Foreman's Residence, South and West Elevations, View Northeast

Barn

A gable-roofed barn is located northwest of the residence (Figure 26). It is clad with board-and-batten siding, although many of the battens are missing. Its primary entrance on the north elevation features swinging doors with Z bracing. An open storage shed is attached to the west elevation. The barn was moved to this location circa 1927 from a site near the creek due to realignment of the County road.

Figure 26 Barn, North Elevation, View Southwest

Garage

A gable-roofed, four-car garage is located east of the house (Figure 27). Clad with vertical and horizontal wood siding, it features two tilt-up garage doors. Although Scott (1990) was not able to definitively identify a construction date for the garage east of the residence and carport northeast of the residence, she suspected they had been constructed after 1950. Aerial photographs show the garage was constructed between 1973 and 1978, and the carport after 1978 (University of California, Santa Barbara [UCSB] Map & Imagery Lab 1973, 1978).

Carport

A shed-roofed carport is located northeast of the house. Enclosed on three sides, its walls appear to be constructed with plyboard. The open south elevation shows wooden support posts and has a slight roof overhang. Although Scott was not able to definitively identify a construction date for the garage east of the residence and carport northeast of the residence, she suspected they had been constructed after 1950. Aerial photographs show the garage was constructed between 1973 and 1978, and the carport after 1978 (UCSB Map & Imagery Lab 1973, 1978).

Figure 27 Garage, North and East Elevations, View Southwest

Playhouse

What Scott referred to as the playhouse now appears to be used for storage. The building is located southeast of the main residence, near the studio and a chicken coop (Figure 28). It is clad with board-and-batten siding and has a side-gabled roof with exposed rafter tails. Its primary entrance, accessed by concrete steps, is a five-paneled wooden door. Fenestration includes wood-sash multi-paned casement windows. Scott estimated its date of construction as c. 1935.

Figure 28 Playhouse, South Elevation, View North

Secondary Residence

A secondary residence is located approximately 220 feet east of the residence. It was not recorded on the 1990 inventory/evaluation forms, and aerial photographs indicate it was built by 1994, likely after Scott's evaluation of the property (NETR online, various). A two-story building, it has a hipped roof with a cross gable, horizontal wood siding, an exterior staircase, and two exterior decks on the façade each lined with wooden railings (Figure 29). Fenestration is composed of vinyl-sash double-hung and casement windows; a contemporary wooden entry door includes a single pane above two panels.

Figure 29 Secondary Residence, South and West Elevations, View Northeast

Studio

A shed-roofed (art) studio is located southeast of the main residence next to the playhouse (Figure 30). It is clad with board-and-batten siding and features a band of clerestory windows under the roof ridge. Partially obscured by foliage, its primary entry appears to be a multi-paned wooden door, and fenestration includes a jalousie window. Scott did not provide a construction date but stated it was “new” in 1990.

Figure 30 Studio, South and West Elevations, View Northeast

Figure 31 View of Avocado Orchard within APE, View Northwest

Property History

Abbott Ranch was carved out of Rancho El Rincon, an 1830s land grant, when Dr. Matthew H. Biggs began subdividing the rancho in the 1870s. Milton Sprague Dimmick bought property making up the greater part of Abbot Ranch in 1876. Based on assessor's records, it is presumed the farmhouse was built under Milton's tenure. He died in 1890 in Los Angeles County and left his property to his widow, Ella, and daughters Carrie and Mabel Martha. After Ella remarried Reverend Jerome F. Tubbs, the property was known as Tubbs Ranch. After Ella's death, Carrie and Mabel Martha continued to live at the ranch until approximately 1918 and retained ownership of the ranch with Reverend Tubbs until 1923. Reverend Tubbs also acquired approximately 10 adjacent acres, which were conveyed to Carrie and Mabel Martha. The ranch was sold in 1923 to Tirey C. Abbott who had arrived in the Carpinteria area the year prior. At the time, the ranch was planted mostly with walnut trees and, to a lesser degree, with beans. Abbott gradually began to change crops, planting his first avocado trees in the mid- to late-1920s. He also introduced lemons to the ranch. In 1927, Santa Barbara County realigned the County road, which required the barn to be moved (to its present location) and the entry drive to the house to be re-oriented. In addition, a house that formerly stood near the barn's original location by the creek was removed sometime before 1927. Tirey married in 1929, and subsequently various improvements were made to the property including enlarging the house and constructing new buildings between 1929 and the 1940s (Scott 1990a).

Tirey Abbott and his family remained on the ranch through the mid-twentieth century, after which the house was rented, when the ranch continued under agricultural production. In the 1980s, Tirey's son Duncan acquired the property, moved into the house with his wife, Meredith, and began to operate the ranch. Additional remodeling occurred in the 1980s, after they moved to the property (Scott 1990a). Meredith, also known as Ky, enjoys a reputation as a local plein air painter (Sullivan Goss n.d.).

Evaluation

Abbott Ranch was previously evaluated by Gloria Scott in 1990, the findings of which were detailed in the Historical Architectural Survey Report and Historic Property Survey Report prepared for the Rincon Creek Bridge Replacement and Realignment Project (Scott 1990a and 1990b; Caltrans District 5 1990). At the time of Scott's evaluation, the ranch included the main single-family residence, barn, foreman's cottage, garage, carport, playhouse, studio, and sheds. Large trees, hedges, and gardens surrounded the house, and the ranch was planted with avocado and lemon orchards (Figure 31).

Scott documented numerous alterations to the circa 1876 residence which originally was constructed as a two-story, cross-gabled, vernacular farmhouse with a cruciform plan. The home essentially doubled in size through additions on the south side of the house and wrapping around the north and east sides of the house. These alterations were detailed by elevation and included:

- Extending the south wall of the home out two separate times.
- Adding French doors and partially removing and capping chimneys.
- Mismatched exterior siding including V-rustic, board-and-batten, channel, 3-lap round-edge drop and plain redwood siding were added.
- Shed-roof dormers were also added to the northeast and southeast corners of the house and hipped-roof dormers were added to the northwest and southwest corners of the house in the early twentieth century.

- A stucco chimney jutting through the roof dormer at the northwest corner was built in the 1920s.
- A cobblestone wrap-around porch was built in the early twentieth century.
- Removal of a portion of the porch's roof.
- Partial enclosure of the porch with multi-light glass panels in the 1940s.
- New replacement redwood decking and stairs on the west elevation were installed in the mid-1980s.
- Installation of new windows in the 1920s.
- Construction of a flat-roofed one-story addition at the southeast corner of the home in 1935.
- Construction of a one-room "shop" addition at the northeast end of the home in 1940.
- Construction of a one-story shed-roof addition which bridges the space between the "shop" addition and the original portion of the home circa 1920s.
- Extension of the kitchen to the north and east and construction of a boxed chimney in 1983 and 1984.
- Construction of a redwood deck in 1983-1984.

At the time of the previous evaluation, the Abbott Ranch was recommended ineligible for inclusion in the NRHP, a finding which received concurrence from the State Historic Preservation Officer on August 9, 1990 (Gualtieri 1990). Scott noted the ranch owner had submitted an application in 1989 to the Ventura County CHB to consider the property for local historic designation, and the CHB believed the property met its criteria. However, the property owner subsequently withdrew the application and the ranch was never designated formally (Scott 1990a and 1990b). This account was not able to be verified after communication with Ventura County Planning staff conducted as a part of this study.

A survey update of the Abbott Ranch was conducted as part of the current study. Based on examination of the subject property, additional changes have occurred to the ranch since the time of its last evaluation, including:

- Solar panels were added to the garage's roof.
- A small portion of the ranch near the junction of the entry drive with Rincon Road was lost due to a realignment of the road completed in 2005 (Bell 1990; Abbott 2019).
- One of the oak trees flanking the entry drive at Rincon Road was lost due to the road realignment (a replacement tree was planted and is now mature) (Bell 1990; Abbott 2019).
- It appears new ancillary structures were added west and east of the foreman's residence and east of the barn.
- The inventory/evaluation forms completed in 1990 did not include the secondary residence east of the main residence. It appears to have been built in the 1990s likely after Scott's evaluation of the ranch.
- The property is still under operation by the Abbott family, with Robert's son Duncan Abbott having joined in the ranch's operation. The Abbotts now also perform ranch management duties for other property owners (Abbott 2019).

Based on the current survey update, the property remains ineligible for listing in the NRHP or CRHR as it has been altered substantially as originally noted in 1990 and detailed above, and no longer retains the necessary integrity for either designation. In addition, the property has undergone

additional alterations since the previous evaluation, which have further diminished its integrity. The property does not appear to meet the criteria for local designation as a Ventura County Landmark as one of the criteria (Criterion 6, Integrity) states the authenticity of the resource's physical identity should be established by evidence of lack of deterioration and significant survival of the characteristics which existed during its period of importance [so the property can be] evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling and association.

Despite its lack of integrity and ineligibility for listing in the NRHP, CRHR or local landmark designation, the property does qualify for listing as a Ventura County Site of Merit. As a farmhouse and avocado and citrus ranch which has remained in ownership and operation by the same family for nearly 100 years, the Abbott Ranch appears to satisfy the criteria for designation as a Ventura County Site of Merit defined as "sites of historical, architectural, community or aesthetic merit which have not been designated as landmarks or points of interest, but which are deserving of special recognition". The eligibility for a Site of Merit does not require a resource to meet an integrity criterion. As such, the property is considered a historical resource for the purposes of CEQA.

5.3.5 SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line (P-56-153060)

Property Description and History

An approximately 200-foot segment of the SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line is located in the APE (Figure 32 and Figure 33). As Becker (2012) reports, portions of the line from Casitas Substation to Santa Barbara Substation, were initially constructed in 1932 at a 60kV capacity approximately 20 years after SCE implemented a 60/66kV capacity system wide, and the remaining portions of the line, from Casitas Substation to Santa Clara Substation and to Ojai Substation date from 1956 and later. Modifications occurred throughout the 1960s and 1970s including the removal of original wood poles and towers, installation of new tubular steel poles, reconfiguration at substations, and an extension to the Ojai Substation built in 1967.

The segment of line passing through and adjacent to the APE is located to the north and south of SR 150/Casitas Pass Road approximately 3.75 miles northeast of Carpinteria. The ranch properties fronting the road are private property and the transmission line was observable only from the public right-of-way.

Figure 32 Portion of Line (P-56-153060) Adjacent to APE, View South

Figure 33 Portion of Line (P-56-153060) Adjacent to APE, View Northwest

Evaluation

The transmission line was previously evaluated in 2012 by Wendy Becker of Urbana Preservation & Planning as part of the Historical Resource / Historic Property Survey Report for the Southern California Edison Company Santa Barbara County Reliability Project. Becker assigned the Santa Clara-Ojai-Santa Barbara 66kV Transmission Line a California Historical Resource Status Code of 6Z, meaning "Found ineligible for NR, CR or Local designation through survey evaluation" (Becker 2012). Rincon documented the portion of the transmission line in the APE as part of the field survey effort. Results of the survey indicate the portion of the line in the APE appears largely as it did at the time of its last evaluation. No information was obtained during the survey to suggest the property would now be eligible for listing in the NRHP, CRHR, or for local designation.

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6 Findings and Recommendations

The cultural resources records search, Native American outreach, historical group consultation, and field surveys resulted in the documentation of two newly identified built-environment resources, the Rincon Chlorination Station and Rincon Pump Plant, located within the project APE. This cultural resources assessment also documents three previously recorded historic-period built-environment resources, SR 192 (P-42-003622), Abbott Ranch (P-56-152756), and the Santa Clara-Ojai-Santa Barbara 66kV Transmission Line (P-56-153060), whose boundaries overlap with portions of the project APE.

The two newly identified resources do not meet any of the criteria for listing in the NRHP, the CRHR, or for local designation. No further management of these resources is recommended. Furthermore, each of the previously recorded resources has been previously recommended ineligible for listing in the NRHP and CRHR. Updated historic resource evaluations conducted for this study identified one property, the Abbott Ranch, as eligible for local designation as a Ventura County Site of Merit and is considered to be a historical resource for the purposes of CEQA in accordance with Ventura County's Initial Study Assessment Guidelines. The property is not considered a historic property under Section 106 of the NHPA. The project involves the installation of underground piping through a section of Abbott Ranch which would not result in substantial adverse change to the historical resource as defined by CEQA Guidelines §15064.5. The project would not physically demolish, destroy, relocate, or alter Abbott Ranch or its surroundings in a manner in which its significance would be materially impaired. The historical resource would continue to retain the physical characteristics which convey its historical significance and justify its inclusion in a local register of historical resources.

Results of this cultural resources assessment indicate no archaeological resources are located in the APE. In addition to the negative study findings, existing disturbances from development suggests there is a low potential for encountering intact subsurface archaeological deposits within the project site. However, potential impacts to archaeological resources could occur in the unlikely event archaeological resources are unexpectedly discovered during project construction. Rincon presents the following recommended mitigation measure for unanticipated discoveries.

Based on the results of the cultural resources assessment, Rincon recommends a finding of ***less than significant impact to historical resources*** under CEQA, ***less than significant impact to archaeological resources with mitigation incorporated*** under CEQA and ***no effect to historic properties*** under Section 106 of the NHPA. No further cultural resources work is recommended for the project.

Rincon presents the following recommendation in case of unanticipated discovery of cultural resources during project development. The project is also required to adhere to regulations regarding the unanticipated discovery of human remains, detailed below.

Recommended Mitigation

Unanticipated Discovery of Cultural Resources

In the event that archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983)

shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist to be prehistoric, then a Native American representative 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 California Register of Historical Resources (CRHR) eligibility shall be completed. If the resource proves to be eligible for the CRHR and significant impacts to the resource cannot be avoided via project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of CCR Guidelines Section 15126.4(b)(3)(C). 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. Casitas 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 California Historical Resources Information System, per CCR Guidelines Section 15126.4(b)(3)(C).

Human Remains

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states 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 prehistoric, the Coroner would notify the Native American Heritage Commission, which would 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 land owner 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.

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Appendix A

Records Search Results (Non-Confidential)

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
VN-00138		1974	Brandoff, Joan	Archaeological Survey Report of Willow Creek Ridge Fuelbreak and Santa Ana Ridge Fuelbreak Arr 05-07-22.	U.S. Forest Service	
VN-00679		1985	Lopez, Robert	An Archaeological Reconnaissance of the Area Involved in a Proposed Parcel Division, Parcel Map Waiver No. 105, at the Eastern End of the Casitas Valley, Ventura County, California	Robert Lopez, Archaeological Consultant	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
VN-01334		1990	Dillon, Brian D.	Archaeological Assessment of Ten Proposed Alternative Locations for Facilities Expansion of the Casitas Municipal Water District Ventura County, California	Brian Dillon, Ph.D, Consulting Archaeologist	56-000005, 56-000048, 56-000058, 56-000082, 56-000113, 56-000117, 56-000166, 56-000482, 56-000900, 56-000929
VN-02792		2010	Williams, Audry	Archaeological Letter Report: WO 6039-4800 9-4842; TD 352285: SCE Red Mountain, Seacliff, Matilija, and Patricia 16kV Deteriorated Pole Replacement Projects, Ventura County	Compass Rose Archaeological, Inc.	
VN-02804		2008	Bruce, BranDee and Amy J. Barnes	Cultural Resources Investigation of the Casitas Dam-Tenders House Replacement Project, Ventura County, California	Bureau of Reclamation	56-152844
VN-03064		2012	Switalski, Hubert and Bardsley, Andrea	Cultural Resource Study for the Proposed Southern California Edison Company's Santa Barbara County Reliability Project, Santa Barbara and Ventura Counties, California	AMEC Environmental and Infrastructure	56-000058, 56-000082, 56-000112, 56-000113, 56-000166, 56-000168, 56-000241, 56-000979, 56-001002, 56-001109, 56-001554, 56-001555, 56-001556, 56-100200, 56-150032, 56-150033, 56-150034, 56-150035, 56-150036, 56-150037, 56-152844

SCCIC Report List

19-07446, Ventura - Santa Barbara Co.

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
VN-00426		1983	MacFarlane, Heather	Cultural Resources Survey: Energetics' Proposed Oil Pipeline Route, Rincon Del Mar Ranch, Ventura County, California.	McClelland Engineers, Inc.	56-000768
VN-00636		1981	Lopez, Robert	An Archaeological Reconnaissance of the Area Involved in a Proposed Oil Well Drillsite on Rincon Del Mar Ranch Ventura County, California	Robert Lopez, Archaeological Consultant	
VN-01731		1990	Anonymous	Historic Property Survey Report Rincon Creek Bridge Replacement and Realignment	Caltrans	56-152756
VN-02298		2006	Jordan, Stacey C. and Cooley, Theodore G.	Archaeological Survey Report for the Southern California Edison Company Replacement of 18 Deteriorated Poles on the Santa Barbara-san Marcos-vegas 66kv, Storke 16kv, Fox 4kv, Braemer 4kv, Dorrance 4kv, Carpoil 16kv, Seacliff 16kv, and Copy 16kv Circuits,	Mooney, Jones & Stokes	56-000062, 56-000768
VN-02791		2008	Wlodarski, Robert	A Phase I Archaeological Study for a Parcel Map Waiver for 7032 Casitas Pass Road, County of Ventura, California	H.E.A.R.T.	56-000636
VN-03064		2012	Switalski, Hubert and Bardsley, Andrea	Cultural Resource Study for the Proposed Southern California Edison Company's Santa Barbara County Reliability Project, Santa Barbara and Ventura Counties, California	AMEC Environmental and Infrastructure	56-000058, 56-000082, 56-000112, 56-000113, 56-000166, 56-000168, 56-000241, 56-000979, 56-001002, 56-001109, 56-001554, 56-001555, 56-001556, 56-100200, 56-150032, 56-150033, 56-150034, 56-150035, 56-150036, 56-150037, 56-152844

CCIC Report List

19-07446, Ventura - Santa Barbara Co.

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SR-00579						
SR-00607		1983	Waldron, W.	Negative Archaeological Survey Report Bridge No. 51-140 Rincon Creek		
SR-01154		1986	Waldron, W.	Archaeological Survey Report for Proposed Bridge Replacement and Road Realignment Project.		
SR-01223		1990	Santoro, L.	A Phase I Cultural Resources Investigation for the Proposed Santa Barbara South Coast Emergency Water Delivery System		
SR-01224		1991	Santoro, L.	Phase I Archaeological Reconnaissance of Casitas Pass Road, Santa Barbara County, California		42-038332
SR-01288		1992	Santoro, L. and Toren, G.	Phase I Archaeological Reconnaissance on Casitas Pass Road (State Highway 192) Santa Barbara County, California. Job No. 69663YQ		
SR-01419		1992	Ann S. Peak, Melinda A. Peak, Robert A. Gerry, Neal J. Neuenschwander, and	Consolidated Report: Cultural Resources Studies for the Proposed Pacific Pipeline Project	Peak and Associates	42-000001, 42-000002, 42-000012, 42-000013, 42-000016, 42-000017, 42-000018, 42-000019, 42-000023, 42-000024, 42-000028, 42-000034, 42-000038, 42-000039, 42-000054, 42-000057, 42-000060, 42-000070, 42-000093, 42-000100, 42-000116, 42-000142, 42-000190, 42-001093, 42-001156, 42-001157, 42-001489, 42-001506, 42-001539, 42-001578, 42-001653, 42-001655, 42-001703, 42-001717, 42-001750, 42-001776, 42-001856, 42-001870, 42-001915, 42-001958, 42-002179, 42-002187
SR-01448		1991	Neal J. Neuenschwander and James R. Oglesby	Class 3 Cultural Resource Assessment of the Proposed Carpinteria and Southern Reroutes, Santa Barbara, Ventura, and Los Angles Counties, California	Peak and Associates	42-000001, 42-000130, 42-001286
SR-01924		1996	Wilcoxon, Larry R.	A Cultural Resource Evaluation for the Twin Pines Ranch Parcel (APN 001-190-06), in Conjunction with the Proposed Development of a Corporate Headquarters and Research and Development Campus for QAD, INC., Santa Barbara County, California	Wilcoxon Archaeological Consultants	42-003397

CCIC Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SR-02102		1987	Pierson, Larry, Schiller, Gerald, and Slater, Richard	Archaeological Resource Study: Morro Bay to Mexican Border: Final Report		
SR-02102b		1987	Pierson, Larry, Schiller, Gerald, and Slater, Richard	Archaeological Resource Study: Morro Bay to Mexican Border Final Report: Appendices (Prehistoric Sites)		
SR-02102c		1987	Pierson, Larry, Schiller, Gerald, and Slater, Richard	Archaeological Resource Study: Morro Bay to Mexican Border Final Report: Appendices (Prehistoric Sites)		
SR-02116		1998	Stone, David	Archaeological Assesment for Residential Improvements to 7450 Shepard Mesa Road, Carpinteria, CA		42-000002
SR-02622		2000	Stone, D.	Phase I Archaeological Resources Report: 6580 Gobernador Canyon Drive Carpinteria, CA APN 001-040-038	Stone Archaeological Consulting	
SR-03016		2003	Stone, David and Leeann Haslouer	Phase 1 Archaeological Resources Report: Proposed Lot Split 6977 Shapard Mesa Drive APN 001-101-24 Santa Barbara County, California		
SR-03095		2003	Carbone, Larry A.	A Phase 1 Archaeological Resources Report For Proposed Construction Of A Swimming pool, 7498 Shepard Mesa Drive, Carpinteria, Santa Barbara County, Ca. (assessors Parcel Number 001-150-037)		
SR-04097		2007	Stone, David	Phase 1 Archaeological Resources Report, 6404 Via Real, Carpinteria Area, Santa Barbara County APN 001-190-042		

CCIC Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SR-04574		2006	Wee, Stephen and Larson, Bryan	Historical Resources Evlauation Report: Masonry Features within State Right-of-Way Along State Route 192, Santa Barbara County, California	JRP Historical Consulting	42-003622, 42-003755, 42-003756, 42-003757, 42-003758, 42-003759, 42-003760, 42-003761, 42-003762, 42-003763, 42-003764, 42-003765, 42-003766, 42-003767, 42-003768, 42-003769, 42-003770, 42-003771, 42-003772, 42-003774, 42-003775, 42-003776, 42-003777, 42-003778, 42-003779, 42-003780, 42-003781, 42-003782, 42-003783, 42-003784, 42-003785, 42-003786, 42-003787, 42-003788, 42-003789, 42-003790, 42-003791, 42-003792, 42-003793, 42-003794, 42-003795, 42-003796, 42-003797, 42-003798, 42-003799, 42-003800, 42-003801, 42-040905
SR-05060		2012	Switalski, Hubert and Bardsley, Andrea	Cultural Resources Study For The Proposed Southern California Edison Company's Santa Barbara County Reliability Project, Santa Barbara and Ventura Counties, California.	AMEC Environment and Infrastructure, Inc.	42-000107, 42-003814, 42-004030, 42-004031, 42-004032
SR-05270		2016	Maki, Mary	Negative Archaeological Survey Report of Approximately .2 Acre for the 6769 Rincon Road Barn Project, Unincorporated Santa Barbara County, California	Conejo Archaeological Consultants	

Report List

19-07446

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
VN-01334		1990	Dillon, Brian D.	Archaeological Assessment of Ten Proposed Alternative Locations for Facilities Expansion of the Casitas Municipal Water District Ventura County, California	Brian Dillon, Ph.D, Consulting Archaeologist	56-000005, 56-000048, 56-000058, 56-000082, 56-000113, 56-000117, 56-000166, 56-000482, 56-000900, 56-000929

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-56-000112	CA-VEN-000112	Resource Name - Delwiche #1	Site	Prehistoric	AP02 (Lithic scatter); AP09 (Burials)	1959 (Leif Landberg and Dick Peirce)	VN-03064

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-56-000138	CA-VEN-000138		Site	Prehistoric	AP02 (Lithic scatter); AP15 (Habitation debris)	1961 (BLACKBURN)	VN-01102, VN-02971
P-56-100391		Resource Name - SBCRP ISO-GANDA-1	Other	Historic	AP16 (Other)	2014	VN-03220
P-56-152844		OHP Property Number - 171003; Other - Guest House (Bldg 5) at El Rancho Co; Resource Name - Casitas Dam Tender's House	Building	Historic	HP04 (Ancillary building)	2008 (Bruce, BranDee, Bureau of Reclamation)	VN-02804, VN-03064
P-56-153060		Resource Name - SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line	Structure	Historic	HP11 (Engineering structure)	2012 (Wendy L. Tinsley Becker, Urabna Preservation & Planning)	VN-03220

SCCIC Resource List

19-07446, Ventura - Santa Barbara Co.

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-56-152756		Resource Name - Abbott Ranch; Resource Name - M.S. Dimmick Ranch/Glenrose	Building	Historic	HP02 (Single family property)	1990 (Gloria Scott, Caltrans)	VN-01731
P-56-153060		Resource Name - SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line	Structure	Historic	HP11 (Engineering structure)	2012 (Wendy L. Tinsley Becker, Urabna Preservation & Planning)	VN-03220

CCIC Resource List

19-07446, Ventura - Santa Barbara Co.

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-42-000002	CA-SBA-000002	Other - Rogers #2 ("Stanley"), Olson's M8	Site	Prehistoric	AP15	1929 (Rogers, D.B.); 1968 (L. Spanne)	SR-01419, SR-02116, SR-04585
P-42-000003	CA-SBA-000003	Other - Rogers #3, "Cate"	Site	Prehistoric	AP15	1929 (D.B. Rogers); 1968 (L. Spanne)	
P-42-000112	CA-SBA-000112		Site	Prehistoric	AP16	1924 (A.B. Elsasser)	
P-42-003622	CA-SBA-003622H	Resource Name - OS-192, MS-192; Other - Highway 192	Site	Historic	HP11; HP19; HP37	1999 (M. Darcangelo, S. Mikesell, Far Western); 2005 (B. Larson, A. Walters, A. Rischel, JRP Historical Consulting)	SR-04283, SR-04574
P-42-038672		Other - IS-60	Other	Prehistoric	AP16	1999 (M. Darcangelo, Far Western Anthropological Research Group)	SR-04283
P-42-040653		OHP PRN - 3013-0004-0000; OHP Property Number - 15890; Other - Bridge #51-140		Historic	HP19		

Resource List

19-07446

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-56-001507	CA-VEN-001507	Resource Name - SBCRP GANDA 1	Site	Prehistoric	AP02; AP11; AP15	2014	VN-03220

Appendix B

Section 106 Consultation

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd, Suite 100
Sacramento, CA 95814
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Ventura-Santa Barbara Counties Intertie Project #19-07446

County: Ventura and Santa Barbara Counties

USGS Quadrangle Name: White Ledge Peak Quadrangle

Township: 04N Range: 024W, 025W Section(s): 25, 26, 29, 30, 32, 34, 35, 36

Company/Firm/Agency: Rincon Consultants, Inc.

Contact Person: Mark Strother

Street Address: 9320 Chesapeake Drive, Suite 218

City: San Diego Zip: 92123

Phone: (760) 918-9444 extension 2047

Email: mstrother@rinconconsultants.com

Project Description: The proposed project involves the construction and operation of potable water infrastructure to connect the Casitas Municipal Water District (CMWD) and Carpinteria Valley Water District (CVWD) water distribution systems. The proposed project would include up to 16,218 linear feet (3.07 miles) of 16-inch-diameter potable water pipeline, two booster pump stations, and a water treatment station. The pipeline would traverse the boundary between Ventura and Santa Barbara counties and would act as a two-way intertie to allow the sharing of water between CMWD and CVWD, as necessary. The proposed project would also involve limited mechanical and valving modifications at CMWD and CVWD facilities along 30,980 linear feet (5.87 miles) of existing pipeline. Rincon has been contracted to conduct a cultural resources study for the project in compliance with section 106 of the National Historic Preservation Act and the California Environmental Quality Act (CEQA). The proposed project will result in ground disturbance. .

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691 Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov

June 3, 2019

Mark Strother
Rincon Consultants

VIA Email to: mike.powers@fire.ca.gov

RE: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Ventura-Santa Barbara Counties Intertie Project, Ventura and Santa Barbara Counties

Dear Mr. Strother:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

> Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;

- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;

- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and

- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

   - Any report that may contain site forms, site significance, and suggested mitigation measures.

     All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the NAHC was negative.
4. Any ethnographic studies conducted for any area including all or part of the APE; and
5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: steven.quinn@nahc.ca.gov.

Sincerely,

Steven Quinn

Steven Quinn
Associate Governmental Program Analyst

Attachment

Ventura-Santa Barbara Counties Intertie Project

Unincorporated Ventura and Santa Barbara Counties, California (Project # 19-07446)

Table 1

Native American Contacts Consulted

Local Group/Government Contact	Rincon Coordination Efforts	Response to Coordination Efforts
Mona Tucker, Chairperson Yak tityu tityu yak tilhini – Northern Chumash Tribe 660 Camino Del Rey Arroyo Grande, CA, 93420 Phone: (805) 748-2121 olivas.mona@gmail.com	**6/18/2019:** Letter sent via U.S. Mail	No response has been received as of June 21, 2019.
Kenneth Kahn, Chairperson Santa Ynez Band of Chumash Indians P.O. Box 517 Santa Ynez, CA, 93460 Phone: (805) 688-7997 kkahn@santaynezchumash.org	**6/18/2019:** Letter sent via U.S. Mail	No response has been received as of June 21, 2019.
Mark Vigil, Chief San Luis Obispo County Chumash Council 1030 Ritchie Road Grover Beach, CA, 93433 Phone: (805) 481-2461 Fax: (805) 474-4729	**6/18/2019:** Letter sent via U.S. Mail	No response has been received as of June 21, 2019.
Fred Collins, Spokesperson Northern Chumash Tribal Council P.O. Box 6533 Los Osos, CA, 93412 Phone: (805) 801-0347 fcollins@northernchumash.org	**6/18/2019:** Letter sent via U.S. Mail	No response has been received as of June 21, 2019.
Gino Altamirano, Chairperson Coastal Band of the Chumash Nation P.O. Box 4464 Santa Barbara, CA, 93140 cbcn.consultation@gmail.com	**6/18/2019:** Letter sent via U.S. Mail	No response has been received as of June 21, 2019.

Local Group/Government Contact	Rincon Coordination Efforts	Response to Coordination Efforts
Julio Quair, Chairperson Chumash Council of Bakersfield 729 Texas Street Bakersfield, CA, 93307 Phone: (661) 322-0121 chumashtribe@sbcglobal.net	**6/18/2019:** Letter sent via U.S. Mail	No response has been received as of June 21, 2019.
Julie Tumamait-Stenslie, Chairperson Barbareño/Ventureño Band of Mission Indians 365 North Poli Avenue Ojai, CA, 93023 Phone: (805) 646-6214 jtumamait@hotmail.com	**6/18/2019:** Letter sent via U.S. Mail	No response has been received as of June 21, 2019.

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

805 644 4455 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

June 17, 2019

Barbareño/Ventureño Band of Mission Indians
Julie Tumamait-Stenslie, Chairperson
365 North Poli Avenue
Ojai, CA 93023
Phone: (805) 646-6214

RE: Ventura-Santa Barbara Counties Intertie Project, unincorporated Ventura and Santa Barbara Counties, California

Dear Chairperson Tumamait-Stenslie:

Casitas Municipal Water District (Casitas) is preparing an Initial Study-Mitigated Negative Declaration for the proposed Ventura-Santa Barbara Counties Intertie Project (proposed project). The proposed project involves the construction and operation of potable water infrastructure to connect Casitas and Carpinteria Valley Water District (CVWD) water distribution systems. The proposed project includes up to approximately 9,200 linear feet (1.7 miles) of 16-inch-diameter potable water pipeline, two booster pump stations, and infrastructure improvements at existing Casitas and CVWD facilities. The pipeline would traverse the boundary between Ventura and Santa Barbara counties and act as a two-way intertie to allow the transfer of water between Casitas and CVWD, as necessary, thereby improving regional water supply reliability. The proposed project is subject to Section 106 of the National Historic Preservation Act, the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA).

As part of the process of identifying cultural resources for this project, Rincon contacted the Native American Heritage Commission (NAHC) on May 10, 2019 and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project site. Rincon received a response from the NAHC on June 3, 2019, which stated the SLF search had been completed with “negative results.” The NAHC suggested we contact you to further discuss the proposed project.

If you have knowledge of cultural resources which may exist within or near the project site, please do not hesitate to contact me at mstrother@rinconconsultants.com, or by telephone at (805) 644-4455 extension 2047. Thank you for your assistance.

Sincerely,
Rincon Consultants, Inc.

Mark Strother, MA
Associate Archaeologist

Enclosure: Project Location Map

Rincon Consultants, Inc.

180 North Ashwood Avenue
Ventura, California 93003

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www.rinconconsultants.com

June 17, 2019

Chumash Council of Bakersfield
Julio Quair, Chairperson
729 Texas Street
Bakersfield, CA 93307
Phone: (661) 322-0121
chumashtribe@sbcglobal.net

RE: Ventura-Santa Barbara Counties Intertie Project, unincorporated Ventura and Santa Barbara Counties, California

Dear Chairperson Quair:

Casitas Municipal Water District (Casitas) is preparing an Initial Study-Mitigated Negative Declaration for the proposed Ventura-Santa Barbara Counties Intertie Project (proposed project). The proposed project involves the construction and operation of potable water infrastructure to connect Casitas and Carpinteria Valley Water District (CVWD) water distribution systems. The proposed project includes up to approximately 9,200 linear feet (1.7 miles) of 16-inch-diameter potable water pipeline, two booster pump stations, and infrastructure improvements at existing Casitas and CVWD facilities. The pipeline would traverse the boundary between Ventura and Santa Barbara counties and act as a two-way intertie to allow the transfer of water between Casitas and CVWD, as necessary, thereby improving regional water supply reliability. The proposed project is subject to Section 106 of the National Historic Preservation Act, the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA).

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Sincerely,
Rincon Consultants, Inc.

Mark Strother, MA
Associate Archaeologist

Enclosure: Project Location Map

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Ventura, California 93003

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June 17, 2019

Coastal Band of the Chumash Nation
Gino Altamirano, Chairperson
P. O. Box 4464
Santa Barbara, CA 93140
cbcn.consultation@gmail.com

RE: Ventura-Santa Barbara Counties Intertie Project, unincorporated Ventura and Santa Barbara Counties, California

Dear Mr. Altamirano:

Casitas Municipal Water District (Casitas) is preparing an Initial Study-Mitigated Negative Declaration for the proposed Ventura-Santa Barbara Counties Intertie Project (proposed project). The proposed project involves the construction and operation of potable water infrastructure to connect Casitas and Carpinteria Valley Water District (CVWD) water distribution systems. The proposed project includes up to approximately 9,200 linear feet (1.7 miles) of 16-inch-diameter potable water pipeline, two booster pump stations, and infrastructure improvements at existing Casitas and CVWD facilities. The pipeline would traverse the boundary between Ventura and Santa Barbara counties and act as a two-way intertie to allow the transfer of water between Casitas and CVWD, as necessary, thereby improving regional water supply reliability. The proposed project is subject to Section 106 of the National Historic Preservation Act, the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA).

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Sincerely,
Rincon Consultants, Inc.

Mark Strother, MA
Associate Archaeologist

Enclosure: Project Location Map

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Ventura, California 93003

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June 17, 2019

Northern Chumash Tribal Council
Fred Collins, Spokesperson
P.O. Box 6533
Los Osos, CA 93412
Phone: (805) 801-0347
fcollins@northernchumash.org

RE: Ventura-Santa Barbara Counties Intertie Project, unincorporated Ventura and Santa Barbara Counties, California

Dear Mr. Collins:

Casitas Municipal Water District (Casitas) is preparing an Initial Study-Mitigated Negative Declaration for the proposed Ventura-Santa Barbara Counties Intertie Project (proposed project). The proposed project involves the construction and operation of potable water infrastructure to connect Casitas and Carpinteria Valley Water District (CVWD) water distribution systems. The proposed project includes up to approximately 9,200 linear feet (1.7 miles) of 16-inch-diameter potable water pipeline, two booster pump stations, and infrastructure improvements at existing Casitas and CVWD facilities. The pipeline would traverse the boundary between Ventura and Santa Barbara counties and act as a two-way intertie to allow the transfer of water between Casitas and CVWD, as necessary, thereby improving regional water supply reliability. The proposed project is subject to Section 106 of the National Historic Preservation Act, the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA).

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Sincerely,
Rincon Consultants, Inc.

M Strother

Mark Strother, MA
Associate Archaeologist

Enclosure: Project Location Map

Rincon Consultants, Inc.
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Ventura, California 93003

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June 17, 2019

San Luis Obispo County Chumash Council
Mark Vigil, Chief
1030 Ritchie Road
Grover Beach, CA 93433
Phone: (805) 481-2461
Fax: (805) 474-4729

RE: Ventura-Santa Barbara Counties Intertie Project, unincorporated Ventura and Santa Barbara Counties, California

Dear Chief Vigil:

Casitas Municipal Water District (Casitas) is preparing an Initial Study-Mitigated Negative Declaration for the proposed Ventura-Santa Barbara Counties Intertie Project (proposed project). The proposed project involves the construction and operation of potable water infrastructure to connect Casitas and Carpinteria Valley Water District (CVWD) water distribution systems. The proposed project includes up to approximately 9,200 linear feet (1.7 miles) of 16-inch-diameter potable water pipeline, two booster pump stations, and infrastructure improvements at existing Casitas and CVWD facilities. The pipeline would traverse the boundary between Ventura and Santa Barbara counties and act as a two-way intertie to allow the transfer of water between Casitas and CVWD, as necessary, thereby improving regional water supply reliability. The proposed project is subject to Section 106 of the National Historic Preservation Act, the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA).

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Sincerely,
Rincon Consultants, Inc.

M Strother

Mark Strother, MA
Associate Archaeologist

Enclosure: Project Location Map

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June 17, 2019

Santa Ynez Band of Chumash Indians
Kenneth Kahn, Chairperson
P.O. Box 517
Santa Ynez, CA 93460
Phone: (805) 688-7997
kkahn@santaynezchumash.org

RE: Ventura-Santa Barbara Counties Intertie Project, unincorporated Ventura and Santa Barbara Counties, California

Dear Chairperson Kahn:

Casitas Municipal Water District (Casitas) is preparing an Initial Study-Mitigated Negative Declaration for the proposed Ventura-Santa Barbara Counties Intertie Project (proposed project). The proposed project involves the construction and operation of potable water infrastructure to connect Casitas and Carpinteria Valley Water District (CVWD) water distribution systems. The proposed project includes up to approximately 9,200 linear feet (1.7 miles) of 16-inch-diameter potable water pipeline, two booster pump stations, and infrastructure improvements at existing Casitas and CVWD facilities. The pipeline would traverse the boundary between Ventura and Santa Barbara counties and act as a two-way intertie to allow the transfer of water between Casitas and CVWD, as necessary, thereby improving regional water supply reliability. The proposed project is subject to Section 106 of the National Historic Preservation Act, the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA).

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Sincerely,
Rincon Consultants, Inc.

M Strother

Mark Strother, MA
Associate Archaeologist

Enclosure: Project Location Map

Rincon Consultants, Inc.
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Ventura, California 93003

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June 17, 2019

yak tityu tityu yak tiłhini – Northern Chumash Tribe
Mona Tucker, Chairperson
660 Camino Del Rey
Arroyo Grande, CA 93420
Phone: (805) 748-2121
olivas.mona@gmail.com

RE: Ventura-Santa Barbara Counties Intertie Project, unincorporated Ventura and Santa Barbara Counties, California

Dear Chairperson Tucker:

Casitas Municipal Water District (Casitas) is preparing an Initial Study-Mitigated Negative Declaration for the proposed Ventura-Santa Barbara Counties Intertie Project (proposed project). The proposed project involves the construction and operation of potable water infrastructure to connect Casitas and Carpinteria Valley Water District (CVWD) water distribution systems. The proposed project includes up to approximately 9,200 linear feet (1.7 miles) of 16-inch-diameter potable water pipeline, two booster pump stations, and infrastructure improvements at existing Casitas and CVWD facilities. The pipeline would traverse the boundary between Ventura and Santa Barbara counties and act as a two-way intertie to allow the transfer of water between Casitas and CVWD, as necessary, thereby improving regional water supply reliability. The proposed project is subject to Section 106 of the National Historic Preservation Act, the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA).

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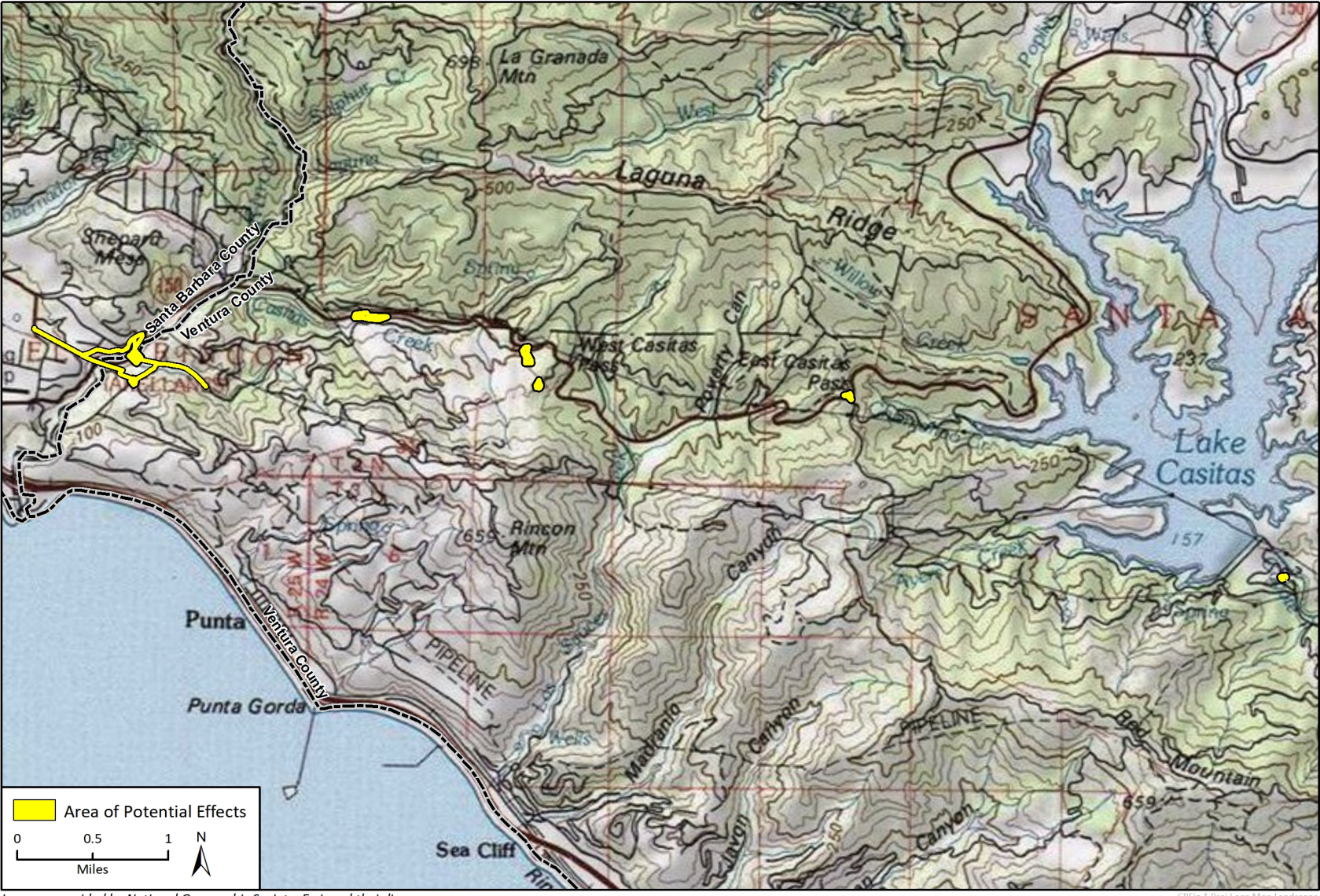
Sincerely,
Rincon Consultants, Inc.

Mark Strother, MA
Associate Archaeologist

Enclosure: Project Location Map



Imagery provided by National Geographic Society, Esri, and their licensors

© 2019. White Ledge Peak Quadrangle. T04N R24W S30,32, T04N R25W S35,36. 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 havechanged since the original topographic map was assembled.

CRFig 1 Proj Locn Map Landscape

Ventura-Santa Barbara Counties Intertie Project, unincorporated Ventura and Santa Barbara Counties, CA (Project # 19-07446)

Table 1

Historic Groups Consulted

Local Group/Government Contact	Rincon Coordination Efforts	Response to Coordination Efforts
Carpinteria Valley Museum of History & Carpinteria Valley Historical Society David Griggs, Director/Curator 956 Maple Avenue Carpinteria, CA 93013 805-684-3112 info@carpinteriahistoricalmuseum.org	**6/18/2019:** Letter sent via U.S. Mail	No response has been received as of June 21, 2019.
Santa Barbara Historical Museum Gledhill Library Michael Redmon, Director of Research 136 East De la Guerra St. Santa Barbara, CA 93101 805-966-1601 ext.105 mredmon@sbhistorical.org	**6/18/2019:** Letter sent via U.S. Mail	No response has been received as of June 21, 2019.
City of Carpinteria Community Development Department Steve Goggia, Director 5775 Carpinteria Avenue Carpinteria, CA 93013 805-755-4414 steveg@ci.carpinteria.ca.us	**6/18/2019:** Letter sent via U.S. Mail	6/20/2019: Mr. Goggia replied via email and stated the city had no comment other to point out that archaeological sites are scattered throughout the area. He suggested consulting the CCIC. Rincon replied that we did conduct records searches at both the CCIC and SCCIC.

Rincon Consultants, Inc.

180 North Ashwood Avenue
Ventura, California 93003

805 644 4455 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

May 29, 2019

David Griggs, Director/Curator
Carpinteria Valley Museum of History & Carpinteria Valley Historical Society
956 Maple Avenue
Carpinteria, CA 93013
805-684-3112
info@carpinteriahistoricalmuseum.org

RE: Ventura-Santa Barbara Counties Intertie Project, unincorporated Ventura and Santa Barbara Counties, California

Dear Mr. Griggs:

Casitas Municipal Water District (Casitas) is preparing an Initial Study/Mitigated Negative Declaration for the proposed Ventura-Santa Barbara Counties Intertie Project (proposed project). The proposed project involves the construction and operation of potable water infrastructure to connect the Casitas and Carpinteria Valley Water District (CVWD) water distribution systems. The proposed project includes up to approximately 16,218 linear feet (3.07 miles) of 16-inch-diameter potable water pipeline, two booster pump stations, and a water treatment station. The pipeline would traverse the boundary between Ventura and Santa Barbara counties and act as a two-way intertie to allow the transfer of water between Casitas and CVWD, as necessary. The proposed project would also involve limited mechanical and valving modifications at Casitas and CVWD facilities along existing pipeline. This project is subject to Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA).

Rincon is currently working in the study area to identify any cultural resource issues for the proposed project. We are writing to provide you with an opportunity to be involved in the Section 106 process as a consulting party. If you have knowledge of or specific concerns regarding cultural resources in the project area, please respond by email to szgurrola@rinconconsultants.com or by telephone at (805) 644-4455 extension 76. Thank you for your assistance.

Sincerely,

Rincon Consultants, Inc.

Susan Zamudio-Gurrola, MHP
Architectural Historian

Enclosure: Project Location Map

Rincon Consultants, Inc.

180 North Ashwood Avenue
Ventura, California 93003

805 644 4455 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

May 29, 2019

Santa Barbara Historical Museum Gledhill Library
Michael Redmon, Director of Research
136 East De la Guerra St.
Santa Barbara, CA 93101
805-966-1601 ext.105
mredmon@sbhistorical.org

RE: Ventura-Santa Barbara Counties Intertie Project, unincorporated Ventura and Santa Barbara Counties, California

Dear Mr. Redmon:

Casitas Municipal Water District (Casitas) is preparing an Initial Study/Mitigated Negative Declaration for the proposed Ventura-Santa Barbara Counties Intertie Project (proposed project). The proposed project involves the construction and operation of potable water infrastructure to connect the Casitas and Carpinteria Valley Water District (CVWD) water distribution systems. The proposed project includes up to approximately 16,218 linear feet (3.07 miles) of 16-inch-diameter potable water pipeline, two booster pump stations, and a water treatment station. The pipeline would traverse the boundary between Ventura and Santa Barbara counties and act as a two-way intertie to allow the transfer of water between Casitas and CVWD, as necessary. The proposed project would also involve limited mechanical and valving modifications at Casitas and CVWD facilities along existing pipeline. This project is subject to Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA).

Rincon is currently working in the study area to identify any cultural resource issues for the proposed project. We are writing to provide you with an opportunity to be involved in the Section 106 process as a consulting party. If you have knowledge of or specific concerns regarding cultural resources in the project area, please respond by email to szgurrola@rinconconsultants.com or by telephone at (805) 644-4455 extension 76. Thank you for your assistance.

Sincerely,

Rincon Consultants, Inc.

Susan Zamudio-Gurrola, MHP
Architectural Historian

Enclosure: Project Location Map

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

805 644 4455 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

May 29, 2019

City of Carpinteria Community Development Department
Steve Goggia, Director
5775 Carpinteria Avenue
Carpinteria, CA 93013
805-755-4414
steveg@ci.carpinteria.ca.us

RE: Ventura-Santa Barbara Counties Intertie Project, unincorporated Ventura and Santa Barbara Counties, California

Dear Mr. Goggia:

Casitas Municipal Water District (Casitas) is preparing an Initial Study/Mitigated Negative Declaration for the proposed Ventura-Santa Barbara Counties Intertie Project (proposed project). The proposed project involves the construction and operation of potable water infrastructure to connect the Casitas and Carpinteria Valley Water District (CVWD) water distribution systems. The proposed project includes up to approximately 16,218 linear feet (3.07 miles) of 16-inch-diameter potable water pipeline, two booster pump stations, and a water treatment station. The pipeline would traverse the boundary between Ventura and Santa Barbara counties and act as a two-way intertie to allow the transfer of water between Casitas and CVWD, as necessary. The proposed project would also involve limited mechanical and valving modifications at Casitas and CVWD facilities along existing pipeline. This project is subject to Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA).

Rincon is currently working in the study area to identify any cultural resource issues for the proposed project. We are writing to provide you with an opportunity to be involved in the Section 106 process as a consulting party. If you have knowledge of or specific concerns regarding cultural resources in the project area, please respond by email to szgurrola@rinconconsultants.com or by telephone at (805) 644-4455 extension 76. Thank you for your assistance.

Sincerely,

Rincon Consultants, Inc.

Susan Zamudio-Gurrola, MHP
Architectural Historian

Enclosure: Project Location Map

From:	Steve Goggia
To:	Susan Zamudio-Gurrola
Cc:	Steve Goggia
Subject:	Ventura-Santa Barbara Intertie Project
Date:	Thursday, June 20, 2019 2:53:29 PM

CAUTION: This email originated from outside of Rincon Consultants. Be cautious before clicking on any links, or opening any attachments, until you are confident that the content is safe .

Hi Susan,
I received your letter today. We have no comments other than as we are sure you are aware, the area is scattered with archaeological sites. If you have not contacted the UCSB CCIC, you should run the locations of the line by them to check for sites and condition the project accordingly.

Thanks

Steve Goggia
Community Development Director
City of Carpinteria
(805) 755-4414

Note:

Carpinteria City Hall has temporarily relocated to 4180 Via Real. This temporary relocation is expected to end in December 2019. Please continue to use our mailing address of 5775 Carpinteria Avenue. All telephone numbers and email addresses will be the same.

Appendix C

Resource Records (Confidential)

State of California — The Resources Agency **Primary #**
DEPARTMENT OF PARKS AND RECREATION **HRI #**

PRIMARY RECORD

Trinomial
NRHP Status Code 6Z

Other Listings
Review Code **Reviewer** **Date**

 *__Resource Name or #:__ Casitas Municipal Water District (CMWD) Chlorination Station

P1. Other Identifier:
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Ventura
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad:** White Ledge Peak **Date:** 1952 (1989 ed.) **T** 4N; **R** 24W; **¼ of ¼ of Sec ;** S.B. **B.M.**
c. Address: None City: unincorporated Ventura County Zip:
d. UTM: Zone: 11S; 281082.03 m E / 3807524.58 m N (G.P.S.)
e. Other Locational Data: Elevation:

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The subject property is located at the southwest corner of the intersection of SR 150 (Casitas Pass Road) and Red Mountain Road. The property contains a one-story building sited above the road grade and surrounded by chain link fencing. Formerly serving as a chlorination building, it is constructed of concrete block and has a nearly square footprint. Its flat roof has a wide overhang; roofing material was not clearly discernible. Fenestration includes metal sash windows on the east and west elevations. Entries on the south elevation include a single metal door with one panel below glazing, and a roll-up metal garage door. All glazing is covered by metal security screens. A small metal lattice tower is located adjacent to and south of the building. The building is surrounded by gravel, and remnants of a small concrete drainage ditch are located to the northwest of the building draining down to SR 150 (Casitas Pass Road).

***P3b. Resource Attributes:** HP9. Public utility building
***P4. Resources Present:** ☒Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #)
South elevation, view north, 6/14/19

***P6. Date Constructed/Age and Sources:** ☒Historic
☐Prehistoric ☐Both
Circa 1960 (CMWD and Google Earth).

***P7. Owner and Address:**
Casitas Municipal Water District
1055 N. Ventura Avenue
Oak View, CA 93022

***P8. Recorded by:**
Susan Zamudio-Gurrola
Rincon Consultants, Inc.
180 N. Ashwood Avenue
Ventura, CA 93003

***P9. Date Recorded**: 6/14/2019

***P10. Survey Type:** Intensive pedestrian

***P11. Report Citation:** Rincon Consultants, Inc. 2022. *Cultural Resources Assessment for the Ventura-Santa Barbara Counties Intertie Project*. Rincon Consultants Project No. 19-07446. Report on file at the Central Coast Information Center, University of California, Santa Barbara and South Central Coastal Information Center, California State University, Fullerton.

***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):

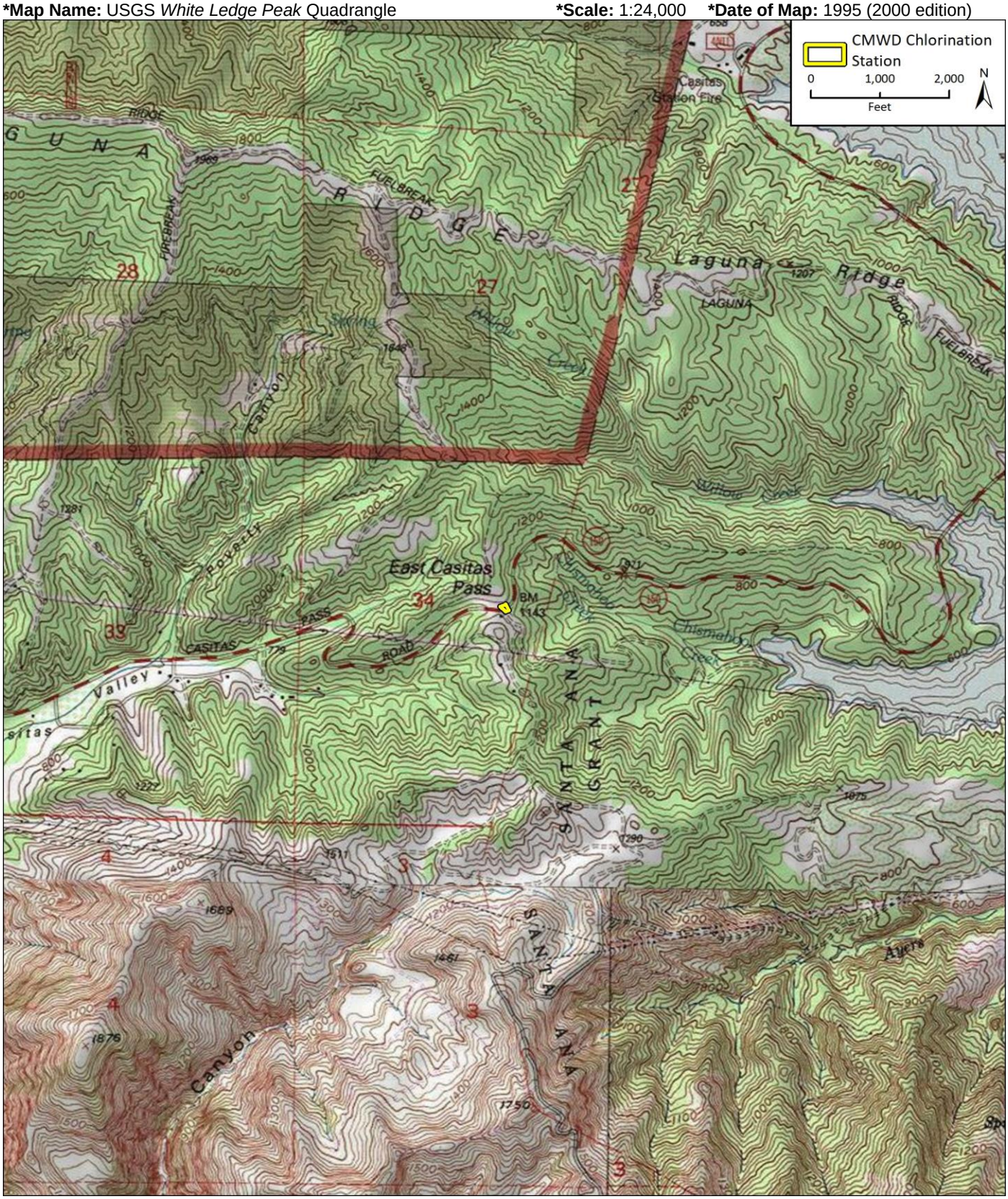
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

***Resource Name or #:** Casitas Municipal Water District (CMWD) Chlorination Station

***Map Name:** USGS *White Ledge Peak* Quadrangle ***Scale:** 1:24,000 ***Date of Map:** 1995 (2000 edition)



BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 6Z

***Resource Name or #** Casitas Municipal Water District Chlorination Station

B1. Historic Name:
B2. Common Name:
B3. Original Use: Chlorination building
B4. Present Use: Unknown

***B5. Architectural Style:** No particular style

***B6. Construction History:** (Construction date, alterations, and date of alterations)
The building was constructed circa 1960 per Casitas Municipal Water District's records and available aerial photographs. No major alterations were observed.

***B7. Moved?** ☒No ☐Yes ☐Unknown **Date:** **Original Location:**

***B8. Related Features:**

B9a. Architect: Unknown
b. Builder: Unknown

***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.)

The subject property contains what was previously known as the Rincon Chlorination Station. Built circa 1960, the building housed one of the chlorination stations within CMWD's system.

The western portion of Ventura County has struggled with water shortages since the early 1900s. As the region's population and agricultural industry grew, the City of Ventura and the Ojai Valley (which were major areas of growth) relied on diversion of river flows or groundwater pumping to satisfy water demand. However, by the 1930s drought conditions led to an increased concern of the reliability of the water supply. Subsequently, in 1952, the Ventura River Municipal Water District was formed. The following year the United States Department of the Interior, Bureau of Reclamation completed reconnaissance-level studies of western Ventura County's water supply and water requirements. This led to the development of the Ventura River Project, which was completed in 1959 and included the Casitas Dam and Reservoir (Lake Casitas), the Robles Diversion and Canal on the Ventura River, and a water distribution system. The Ventura River Municipal Water District was renamed in 1971 to Casitas Municipal Water District. During the period between 1959 and 1989, CMWD made numerous water service connections to serve water to western Ventura County (CMWD 2016).

Presently, CMWD manages a system consisting of Lake Casitas, approximately 97 miles of main and distribution pipelines, nine pumping plants, four chlorination stations, fourteen steel reservoirs, and a pressure filtration treatment plant developed in 1995 (CMWD 2016). Once the filtration treatment plant was completed and became fully operational in 1997, the subject building discontinued being used for chlorination (CMWD 2005; Aranda 2019). CMWD's system serves as a primary supply for many direct customers and as a supplemental, or backup supply, for groundwater users during times of drought (CMWD 2016). See continuation sheet, p. 4.

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

***B12. References:**

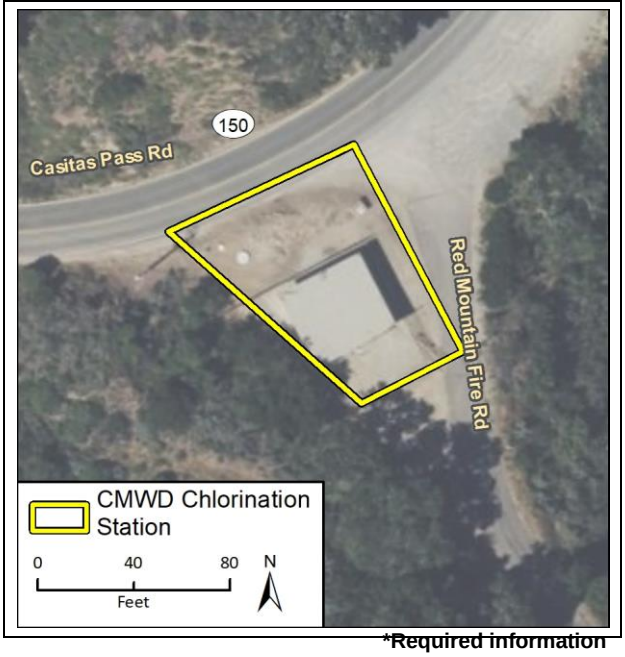
Aranda, Julia (Engineering Manager, Casitas Municipal Water District). 2019. Personal communication with author, June 14, 2019.

Casitas Municipal Water District (CMWD). 2005. Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2005. Prepared by Denise Collin.

B13. Remarks:

***B14. Evaluator:** Susan Zamudio-Gurrola
***Date of Evaluation:** June 17, 2019

(This space reserved for official comments.)



B10. Significance, continued:

The subject property, a former chlorination building, is recommended ineligible for listing in the NRHP, CRHR and local designation. It is one of several chlorination stations that was utilized by CMWD as part of their larger system which includes numerous buildings, engineering structures and associated infrastructure. Archival research did not indicate this individual building was a key or indispensable part of the water treatment and distribution system; it did not play any significant role in the system. The subject property, therefore, is recommended ineligible for the NRHP and CRHR under Criteria A/1. Archival research did not uncover any associations with persons important to national, state or local history; thus, the property is recommended ineligible under Criteria B/2. Constructed with utilitarian materials and with no particular architectural style, the building is a ubiquitous, industrial-type structure that is very similar, if not identical, to other buildings in CMWD's water treatment and distribution system. Therefore, the subject property is not eligible under Criteria C/3 as it does not embody the distinctive characteristics of a type, period, region or method of construction, nor does it represent the work of a master or possess high artistic values. It also does not appear to represent a significant and distinguishable entity whose components may lack individual distinction. There is no information to indicate that the property has the potential to yield information important in prehistory or history, and therefore is recommended ineligible under Criteria D/4. Lastly, there is no evidence to suggest the chlorination building could be a contributor to a potential historic district as part of the larger water system. For the same reasons above, the property is also recommended ineligible under local designation criteria.

B12. References, continued:

Casitas Municipal Water District. 2016. Final Urban Water Management Plan and Agricultural Water Management Plan, 2016 Update. Prepared by Brad Milner, Milner-Villa Consulting.

Casitas Municipal Water District. Records on file for Rincon Chlorination Station.

NETR Online. 1947 and 1967. Aerial photos of subject property. Accessed June 10, 2019 at historicaerials.com

Newspapers.com. Various. Archived *Oxnard Press-Courier* issues, 1957-1961.

Former chlorination building, north and east elevations, view SW, 6-14-19.

State of California — The Resources Agency **Primary #**
DEPARTMENT OF PARKS AND RECREATION **HRI #**

PRIMARY RECORD

Trinomial
NRHP Status Code 6Z

Other Listings
Review Code **Reviewer** **Date**

 *__Resource Name or #:__ Casitas Municipal Water District Rincon Pump Plant

P1. Other Identifier:
***P2. Location:** ☐ **Not for Publication** ☒**Unrestricted** ***a. County:** Ventura
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad:** Ventura **Date:** 1951 (1972 ed.) **T** 3N; **R** 23W; **¼ of ¼ of Sec ;** S.B. **B.M.**
c. Address: None City: unincorporated Ventura County Zip:
d. UTM: Zone: ; mE/mN (G.P.S.)
e. Other Locational Data: Elevation:

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The subject property, known as the Rincon Pump Plant, is located near the southeastern edge of Lake Casitas. The property has a complex of buildings and structures which includes a one-story building, an above-ground concrete basin edged with a metal pole railing and metal staircase, a raised cylindrical tank, additional infrastructure mounted on a concrete pad, a grooved-metal-panel shed, and various chain link fences enclosing portions of the facility. The pump station building is constructed with concrete block and has a flat roof with a wide overhang. Fenestration includes four-light, metal sash windows. One of the windows appears to have had glazing replaced with a slatted vent. A roll-up metal garage door, single metal entry door with one panel below glazing, and a horizontally-slatted vent are also located on the south elevation. A similar single metal door is located on the west elevation.

To the southeast of the pump plant complex is a small one-story, concrete block building and an adjacent open shed covering chemical tanks. Slightly further to the east is an open shed that shelters infrastructure of an unknown function, and a large, cylindrical, covered tank. Across the road further east are what appear to be drying beds.

***P3b. Resource Attributes:** HP9. Public utility building; HP11. Engineering structure
***P4. Resources Present:** ☒Building ☒Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5b. Description of Photo: Overview of pump plant, view to northeast, 6-14-2019.

***P6. Date Constructed/Age and Sources:** ☒Historic ☐Prehistoric ☐Both
Circa 1958 (CMWD)

***P7. Owner and Address:**
Casitas Municipal Water District

***P8. Recorded by:**
Susan Zamudio-Gurrola
Rincon Consultants, Inc.
180 N. Ashwood Ave.
Ventura, CA 93003

***P9. Date Recorded:** 6-17-2019

***P10. Survey Type:** Intensive

***P11. Report Citation:**

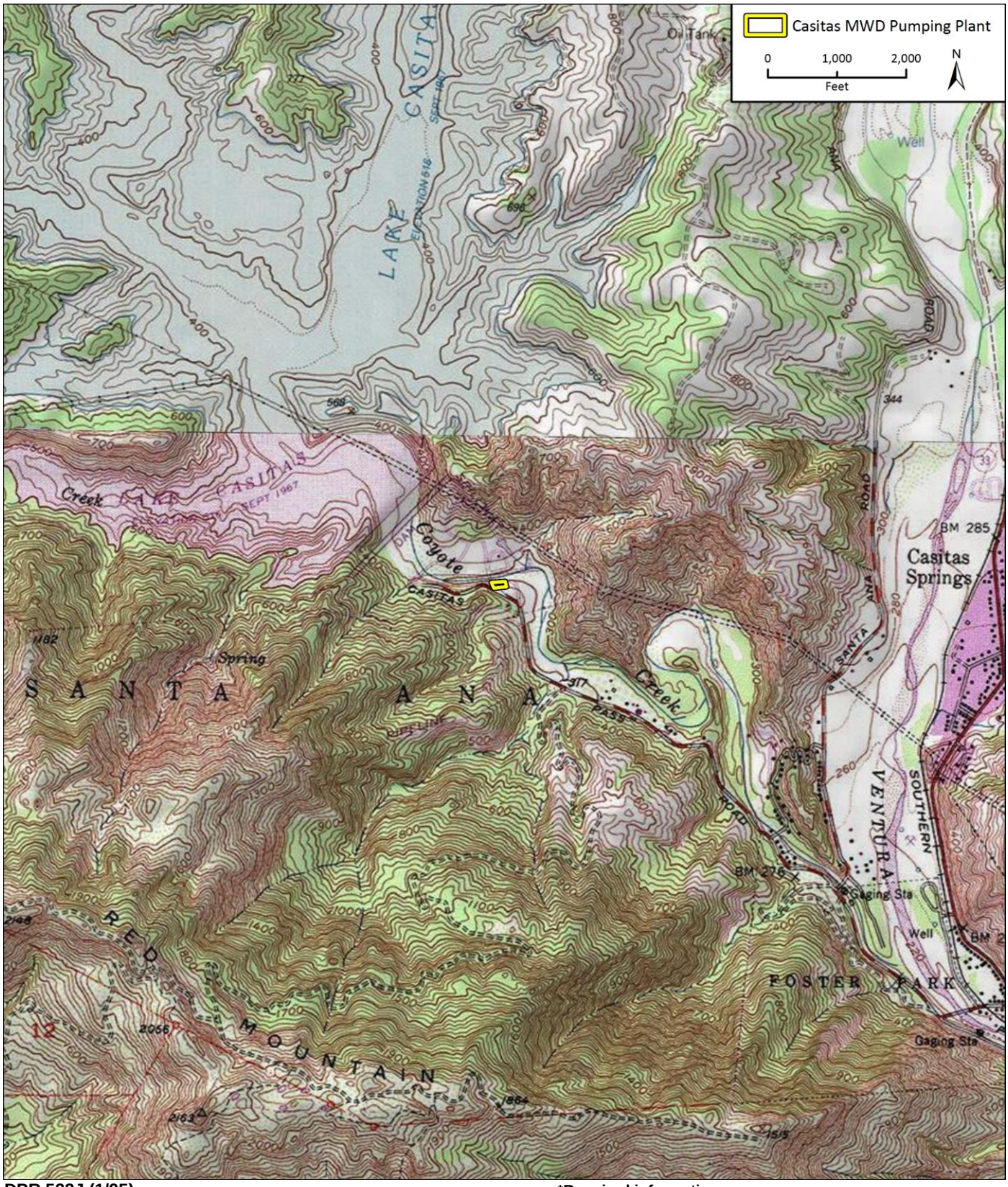
Rincon Consultants, Inc. 2022. Cultural Resources Assessment for the Ventura-Santa Barbara Counties Intertie Project. Rincon Consultants Project No. 19-07446. Report on file at the Central Coast InformationCenter, University of California, Santa Barbara and South Central Coastal Information Center, California State University, Fullerton.

***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):

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION	Primary # HRI#
LOCATION MAP	Trinomial

 ***Resource Name or #:** Casitas Municipal Water District Rincon Pump Plant

***Map Name:** USGS Ventura & Matilija Quadrangles ***Scale:** 1:24,000 ***Date of Map:** Ventura 1951 (1972 ed.), Matilija 1995 (2000 ed.)



BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 6Z

***Resource Name or #** Casitas Municipal Water District Rincon Pump Plant

B1. Historic Name:
B2. Common Name:
B3. Original Use: Pump plant
B4. Present Use: Same

***B5. Architectural Style:** No particular style

***B6. Construction History:** (Construction date, alterations, and date of alterations)
The pump plant was constructed circa 1958 per Casitas Municipal Water District's records. No additional permits were uncovered. The grooved metal-panel shed west of the building appears to be more recent construction.

***B7. Moved?** ☒No ☐Yes ☐Unknown **Date:** **Original Location:**

***B8. Related Features:**

B9a. Architect: U.S. Dept. of the Interior Bureau of Reclamation
b. Builder: Unknown

***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.)

The western portion of Ventura County has struggled with water shortages since the early 1900s. As the region's population and agricultural industry grew, the City of Ventura and the Ojai Valley (which were major areas of growth) relied on diversion of river flows or groundwater pumping to satisfy water demand. However, by the 1930s drought conditions led to an increased concern of the reliability of the water supply. Subsequently, in 1952, the Ventura River Municipal Water District was formed. The following year the United States Department of the Interior, Bureau of Reclamation completed reconnaissance-level studies of western Ventura County's water supply and water requirements. This led to the development of the Ventura River Project, which was completed in 1959 and included the Casitas Dam and Reservoir (Lake Casitas), the Robles Diversion and Canal on the Ventura River, and a water distribution system (CMWD 2016). Plans for the subject pump plant were drawn in mid-1957; it was also developed as a part of the larger Ventura River Project (CMWD 1957).

The Ventura River Municipal Water District was renamed in 1971 to Casitas Municipal Water District. During the period between 1959 and 1989, CMWD made numerous water service connections to serve water to western Ventura County. Presently, CMWD manages a system consisting of Lake Casitas, approximately 97 miles of main and distribution pipelines, nine pumping plants, four chlorination stations, fourteen steel reservoirs, and a pressure filtration treatment plant developed in 1995. CMWD's system serves as a primary supply for many direct customers and as a supplemental, or backup supply, for groundwater users during times of drought (CMWD 2016). See continuation sheet, p. 4.

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

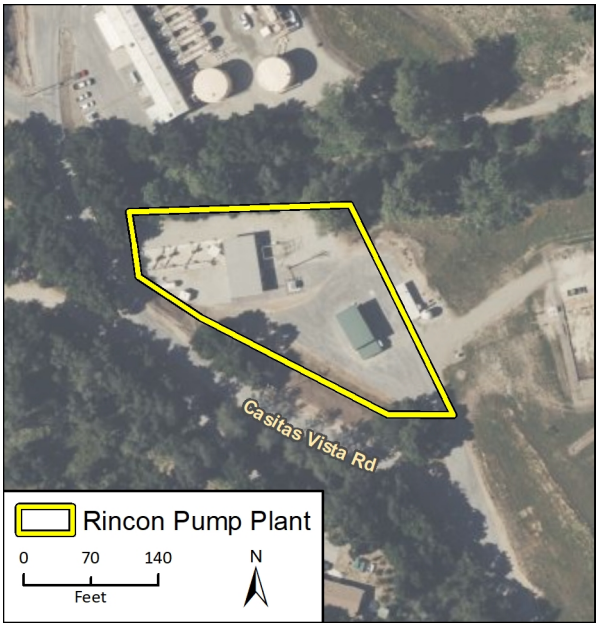
***B12. References:**

Casitas Municipal Water District (CMWD). 1957. Plans for the Rincon Pumping Plant developed by the U.S. Department of the Interior Bureau of Reclamation. On file with CMWD.

See continuation sheet, p. 4.

B13. Remarks:

***B14. Evaluator:** Susan Zamudio-Gurrola
***Date of Evaluation:** June 17, 2019



(This space reserved for official comments.)

*Required information

B10. Significance, continued:

The subject property, known as the Rincon Pump Plant, is recommended ineligible for listing in the NRHP, CRHR and local designation. It is a component of CMWD's larger water treatment, storage and distribution system, which includes numerous buildings, engineering structures and associated infrastructure. The Rincon Pump Plant is one of nine pumping plants in the system (CMWD 2016). Archival research did not indicate this particular pump plant individually played a significant role in the overall system. In comparison to other CMWD facilities, the subject pump plant is not instrumental or a significant feat of engineering. The property, therefore, is recommended ineligible for the NRHP and CRHR under Criteria A/1. Archival research did not uncover any associations with persons important to national, state or local history; thus, the property is recommended ineligible under Criteria B/2. Constructed with utilitarian materials and with no particular architectural style, the building and associated infrastructure are ubiquitous, industrial-type structures. The flat-roofed concrete block building is very similar, if not identical, to other buildings in CMWD's water treatment and distribution system such as the former chlorination building. Therefore, the subject property is not eligible under Criteria C/3 as it does not embody the distinctive characteristics of a type, period, region or method of construction, nor does it represent the work of a master or possess high artistic values. It also does not appear to represent a significant and distinguishable entity whose components may lack individual distinction. There is no information to indicate that the property has the potential to yield information important in prehistory or history, and therefore is recommended ineligible under Criteria D/4. In addition, there is no evidence to suggest that the pump plant could be a contributor to a potential historic district as part of the Casitas water system.

B12. References, continued:

Casitas Municipal Water District. 2016. Final Urban Water Management Plan and Agricultural Water Management Plan, 2016 Update. Prepared by Brad Milner, Milner-Villa Consulting.

Newspapers.com. Various. Archived *Oxnard Press-Courier* issues, 1957-1961.

Infrastructure adjacent to pump station building, view NW.

Pump station building, north & east elevations, view SW.

***Recorded by:** Susan Zamudio-Gurrola ***Date:** June 5, 2019 ☐ Continuation ☒Update

The subject property consists of a segment of Highway 192 (aka Foothill Road, aka Casitas Pass Road) spanning between Highway 150 on the east to approximately 0.25-mile south of Shepherd Mesa Road on the west. Highway 192 was previously evaluated in 1999 by Darcangelo (of Far Western) and Mikesell (of JRP Historical Consulting) as part of a Cultural Resources Inventory of Caltrans District 5 Rural Highway, and in 2005 by Larson et. al. of JRP Historical Consulting as part of the Historical Resources Evaluation Report for the Replacement of Dressed Sandstone Culvert on State Route 192 Project.

Highway 192 is a 21-mile long highway that roughly parallels the east-west coastline between Highway 150 on the east and Highway 154 on the west. It was created in 1933 from various county roads including (from east to west) Casitas Pass Road, Foothill Road, Toro Canyon Road, East Valley Road, Sycamore Canyon Road, Stanwood Drive, and Foothill Road. As such Highway 192 passes through the communities of Carpinteria, Montecito, Santa Barbara and Goleta. It acquired the nickname "Foothill Road" as early as the turn of the 19th century. A secondary highway serving local traffic, it follows an alignment that was acquired and developed over a nearly 60-year period (Larsen et. al. 2005).

Larson et. al. found that the highway had lost much of its integrity, only retaining integrity of location and setting. In addition, Larson et. al. found that historic-period highway-related stone masonry features along Highway 192 (including bridges, retaining walls, culverts and a tree well) did not meet the criteria for listing in the NRHP as a historic district. A California Historical Resource Status Code of 6Z was assigned, meaning Highway 192 was found ineligible for NRHP, CRHR or local designation through survey evaluation (Larson et. al. 2005).

The current survey update of the subject property was conducted on May 21, 2019 as part of the Cultural Resources Assessment report for the Ventura-Santa Barbara Counties Intertie Project, Counties of Ventura and Santa Barbara. Based on examination of the segment of Highway 192 that is located in that project's APE, it appears largely as it did at the time of its last evaluation, and no information was uncovered to suggest the property would now be eligible for listing in the NRHP, CRHR or for local designation.

References:

Darcangelo, M. and S. Mikesell. 1999. State of California Department of Parks and Recreation (DPR) 523 series forms for OS-192, MS-192/Highway 192 (P-42-003622). On file, Central Coast Information Center, University of California, Santa Barbara.

Larsen, B., A. Walters, A. Rischel. 2005. State of California Department of Parks and Recreation (DPR) 523 series forms for OS-192, MS-192/State Route 192 (P-42-003622). On file, Central Coast Information Center, University of California, Santa Barbara.

Highway 192, slightly west of Highway 150, May 21, 2019.

Looking east near 6900 Foothill Road, May 21, 2019.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

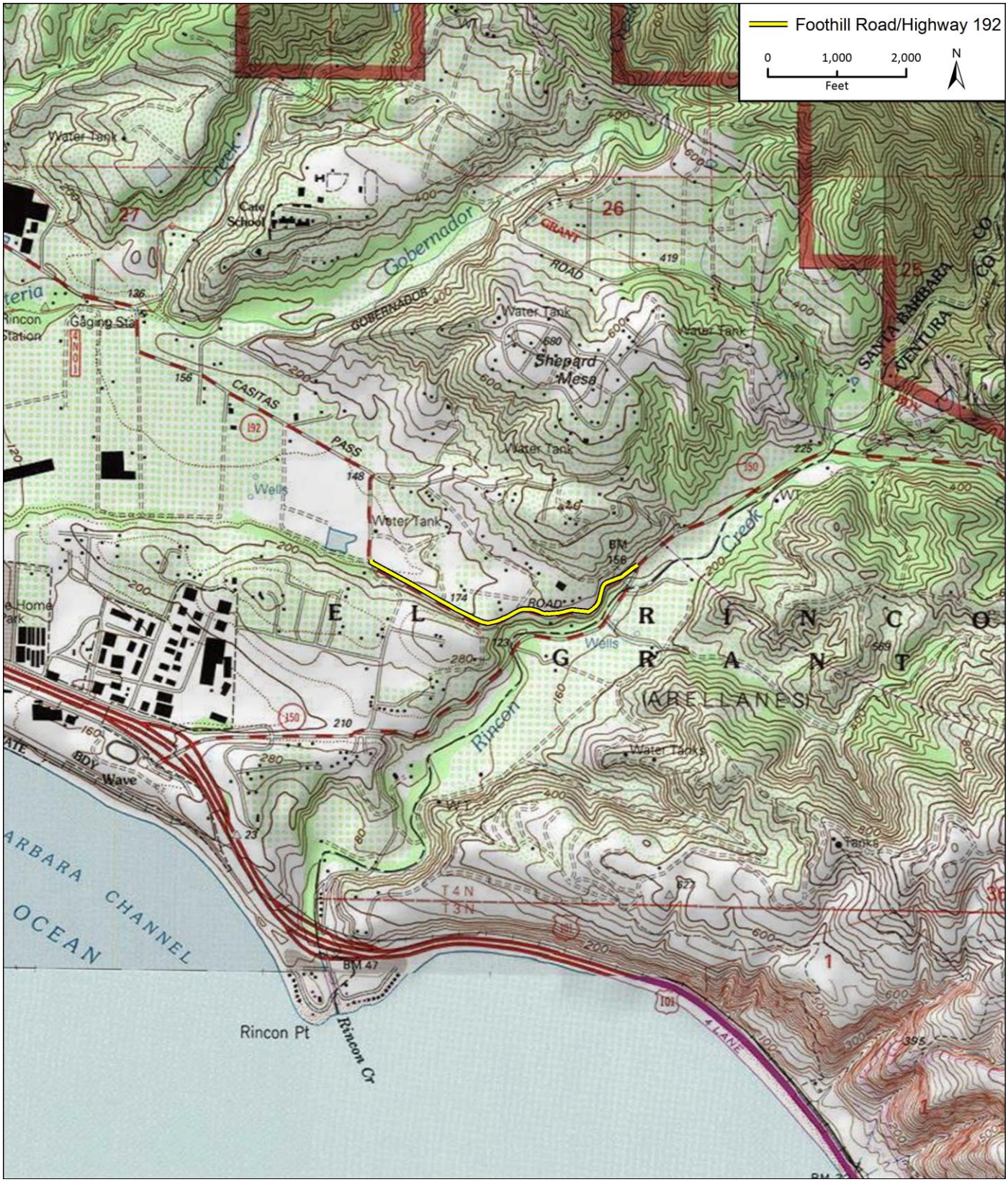
LOCATION MAP

Primary # P-42-003622
HRI#
Trinomial CA-SBA-3622H

***Resource Name or #:** Highway 192 / State Route 192 / Casitas Pass Road / Foothill Road

***Map Name:** USGS *White Ledge Peak* Quadrangle

***Scale:**1:24,000 ***Date of Map:** 1952 (photorev. 1988)



***Required information**

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-42-003622
HRI #
Trinomial CA-SBA-3622H
NRHP Status Code
Other Listings
Review Code Reviewer Date

*Resource Name or # OS-192, MS-192

P1. Other Identifier: Highway 192
* P2. Location: ☑ Not for Publication ☐ Unrestricted *a. County: Santa Barbara
* b. USGS Quad: See Continuation Sheet
c. Address: Highway 192, post mile 0 to 21.06
d. UTM:
e. Other Locational Data:
See Continuation Sheet for the Primary Record.

* P3a. Description:
For this survey (Caltrans District 5 TEA [Transportation Enhancement Activity] Survey) Highway 192 was only recorded in Sata Barbara County. Included in this primary form is the modern alignment (MS-192) within Santa Barbara County. Historic features found along the modern alignment are detailed on the attached linear form. Highway 192 is a 21-mile long highway in Santa Barbara County, traversing the foothills of Santa Barbara and Montecito between Highway 154 and Highway 101. The roadway was brought into the State Highway System in 1933. The road was built by Santa Barbara County in 1926; Caltrans retains copies of the original county plans. The County called it Valley Road in the mid-1920s. The alignment of Highway 192 is virtually unchanged from its 1926 construction and 1933 adoption into the State Highway System.

* P3b. Resource Attributes: HP37. Highway
* P4. Resources Present: ☐Building ☐Structure ☐Object ☑Site ☐District ☐Element of District ☐Other (Isolates, etc.

*P5b. Description of Photo:
Feature M of Highway 192, Romero Canyon Creek Bridge.

*P6. Date Constructed/Age & Sources:
☑Historic ☐Prehistoric ☐Both

*P7. Owner and Address:
Caltrans District 5, 50 Higuera Street, San Luis Obispo, CA 93401-5415

*P8. Recorded by:
M. Darcangelo (FW), S. Mikesell (JRP), Far Western, P.O. Box 413, Davis CA 95617

*P9. Date Recorded: 9/25/99

*P10. Survey Type:
Intensive pedestrian survey

* P11. Citation: Mikkelsen, P., et al., 2001. Cultural Resources Inventory of Caltrans District 5 Rural Highways, Santa Barbara County, California: Highways 1, 33, 101, 135, 150, 154, 166, 192, and 246

* 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:

CONTINUATION SHEET FOR THE PRIMARY RECORD

*P2b. Quad:
Goleta (1950, photorevised 1988), Santa Barbara (1952, photorevised 1967), Carpinteria (1952, photorevised 1988), White Ledge Peak (1952, photorevised 1988)

Township and range, post miles, and other locational information specific to each feature or highway segment is recorded on the Linear Feature Forms.

*P2e. Other Locational Data:

Highway 192 runs east from its intersection with Highway 154 in the town of Santa Barbara in Santa Barbara County. It follows a line just south of the Los Padres National Forest and just north of the town of Santa Barbara, winding its way though the towns of Montecito and Carpenteria, before ending at its intersection with Highway 150 at the Santa Barbara/ Ventura County line.

GPS coordinates were collected at features found along the modern alignment.

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LINEAR FEATURE RECORD

Primary # P-42-003622
HRI #
Trinomial CA-SBA-3622H

 ***Resource Name or #:** OS-192, MS-192

L1. Historic and/or Common Name Casitas Pass Road, Foothill Road, East Valley Road

L2a. Portion Described ☐ Entire Resource ☑ Segment ☐ Point Observation **Designation:** Modern Hw 192 (MS-192)

L2b. Location of Point or Segment:
See Continuation Sheet for the Primary Record, *P2e. Other Locational Data. Hihgway 192 was surveyed between post miles 0 and 21.06 during this project.

L3. Description:
See Primary Record, *P3a. Description.

L4. Dimensions:
a. Top Width:
b. Bottom Width
c. Height or Depth:
d. Length of Segment:

L5. Associated Resources:
See Continuation Sheet for the Linear Feature Record for the Modern Alignment, Highway 192.

L4e. Sketch of Cross-Section: **Facing:**

L6. Setting:

L7. Integrity Considerations:

L8b. Description of Photo, Map, or Drawing
Overview of highway with Feature Y to the left of the highway.

L9. Remarks:

L10. Form Prepared By:
M. Darcangelo, Far Western Anthropological Resarch Group, Inc.

L11. Date: 9/25/99

CONTINUATION SHEET FOR THE LINEAR FEATURE RECORD FOR THE MODERN ALIGNMENT, HIGHWAY 192

L5. Associated Resources:

FEATURE Z: Santa Barbara County, Santa Barbara 7.5' USGS quad (1952, photorevised 1967); T 4N, R 27W, SW 1/4 of the NE 1/4 of Section 11. UTM coordinates: Zone 11, 253988mE / 3814764mN. Post mile 5.68, both sides. Appears to be the original 1924 feature. Feature Z is a water tunnel of dressed sandstone and mortar with one capping stone. Tunnel measurements: 4 ft (w) x 4 ft (h).

FEATURE Y: Santa Barbara County, Santa Barbara 7.5' USGS quad (1952, photorevised 1967); T 4N, R 27W, SW 1/4 of the NE 1/4 of Section 11. UTM coordinates: Zone 11, 254051 mE / 3814737mN; 254078 mE/ 3814694 mN. Post mile 5.69 to 5.70, right (south) side. Appears to be the original 1924 feature. Feature Y is a retaining wall of dressed sandstone and mortar with capping stones. The wall is adjacent to the south of Highway 192. Measurements: 53 ft (l) x 11 ft (h) x 18 in (w).

FEATURE X: Santa Barbara County, Santa Barbara 7.5' USGS quad (1952, photorevised 1967); T 4N, R 27W, NE 1/4 of the SE 1/4 of Section 11. UTM coordinates: Zone 11, 254365mE / 3814321mN. Post mile 5.96, right (south) side. Feature X is a shrine dedicated to "Jack" at the intersection of Highways 144 & 192. The plaque on the monument reads, "Jack To His Friends 1926". The shrine is in the shape of a building [15 ft (h) X 10 ft (w)]. Associated features include a bench, a fountain with a trough and a metal pipe fence that surrounds the shrine. The shrine and associated features are constructed on a large concrete pad.

FEATURE U: Santa Barbara County, Santa Barbara 7.5' USGS quad (1952, photorevised 1967); Pueblo Lands of Santa Barbara. UTM coordinates: Zone 11, 255235mE / 3814186mN. Post mile 6.55, both sides. Appears to be the original 1924 feature. Feature U is a water tunnel of dressed sandstone and mortar. Interior tunnel measurements: 52 in (w) x 28 in (h). Additional rounded river cobbles have been constructed on top of tunnel.

FEATURE T: Santa Barbara County, Santa Barbara 7.5' USGS quad (1952, photorevised 1967); Pueblo Lands of Santa Barbara. UTM coordinates: Zone 11, 255969mE / 3813992mN. Post mile 7.19, both sides. Appears to be the original 1924 feature. Feature T is a water tunnel of dressed sandstone and mortar. Interior tunnel measurements: 36 in (w) x 20 in (h).

FEATURE S: Santa Barbara County, Santa Barbara 7.5' USGS quad (1952, photorevised 1967); Pueblo Lands of Santa Barbara. UTM coordinates: Zone 11, 256388mE / 3813891mN. Post mile 7.48, both sides. Appears to be the original 1924 feature. Feature S is a water tunnel of dressed sandstone and mortar. Interior tunnel measurements: 40 in (w) x 30 in (h). Portions of the original tunnel have been destroyed by road construction. A modern rock guardrail exists above the tunnel.

FEATURE P: Santa Barbara County, Carpinteria 7.5' USGS quad (1952, photorevised 1988); Pueblo Lands of Santa Barbara. UTM coordinates: Zone 11, 259328 mE / 3813783 mN; 259546 mE/ 3813797 mN. Post mile 9.60 to 9.73, right (south) side. Appears to be the original 1924 feature. Feature P is a retaining wall made of dressed sandstone and mortar on the south side of Highway 192 next to San Ysidro Creek. Measurements: 650 ft (l) x 3 ft (h) x 21 in (w).

FEATURE O: Santa Barbara County, Carpinteria 7.5' USGS quad (1952, photorevised 1988); Pueblo Lands of Santa Barbara. UTM coordinates: Zone 11, 259421mE / 3813819mN. Post mile 9.68, both sides. Appears to be the original 1924 feature. Feature O is a water tunnel constructed of dressed sandstone and mortar. Sandstone blocks are one course high. Measurements: 66 in (l) x 64 in (h) x 18 in (w).

FEATURE K: Santa Barbara County, Carpinteria 7.5' USGS quad (1952, photorevised 1988); Pueblo Lands of Santa Barbara. UTM coordinates: Zone 11, 262007 mE/ 3813372 mN. Post mile 11.35 to 11.43, left (north) side. Appears to be the original 1924 feature. Feature K is a retaining wall of dressed sandstone and mortar. The retaining wall is 2 feet high with capstones. Measurements: 420 ft (l) x 3 ft (h) x 15 in (w).

FEATURE H: Santa Barbara County, Carpinteria 7.5' USGS quad (1952, photorevised 1988); T 4N, R 26W, SW 1/4 of the SW 1/4 of Section 11 and SE 1/4 of the SE 1/4 of Sec 10. UTM coordinates: Zone 11, 262568 mE / 3813342 mN; 263083 mE/ 3813392 mN. Post mile 11.7 to 12.02, left (north) side. Appears to be the original 1924 feature. Feature H is a dressed sandstone retaining wall 2-3 courses high. Measurements: 0.39 mile (l) x 3 ft (h).

FEATURE J: Santa Barbara County, Carpinteria 7.5' USGS quad (1952, photorevised 1988); T 4N, R 26W, SE 1/4 of the SE 1/4 of Section 10. UTM coordinates: Zone 11, 262570mE / 3813343mN. Post mile 11.70, both sides. Appears to be the original 1924 feature. Feature J is a water tunnel of dressed sandstone and mortar. Tunnel interior is "V" shaped. Sandstone blocks are stacked four courses high. Measurements: 12 ft (l) x 4 ft (h).

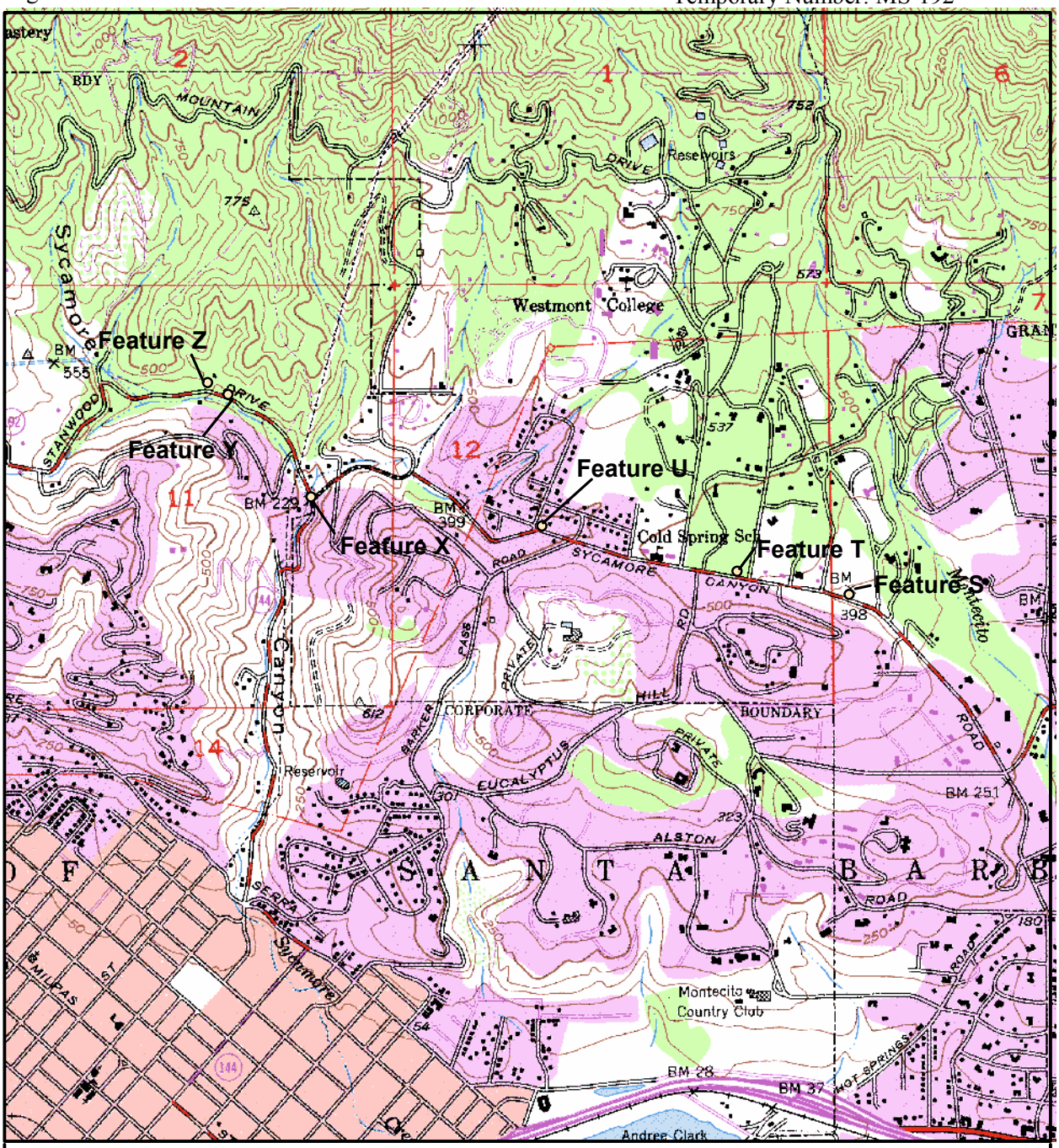
FEATURE I: Santa Barbara County, Carpinteria 7.5' USGS quad (1952, photorevised 1988); T 4N, R 26W, SW 1/4 of the SW 1/4 of Section 11. UTM coordinates: Zone 11, 262719mE / 3813362mN. Post mile 11.78, both sides. Appears to be the original 1924 feature. Feature I is a water tunnel of dressed sandstone and mortar. Tunnel interior is "L" shaped. Guardrail consists of sandstone blocks two courses high. Measurements: 13 ft (l) x 2 ft 7 in (h).

FEATURE F: Santa Barbara County, Carpinteria 7.5' USGS quad (1952, photorevised 1988); T 4N, R 26W, NE 1/4 of the NW 1/4 of Section 14. UTM coordinates: Zone 11, 263381mE / 3813298mN. Post mile 12.21, both sides. From the town of Carpinteria drive west on Highway 192 for approximately 4.5 miles. Appears to be the original 1924 feature. Feature F is a dressed sandstone and mortar culvert with corrugated pipe.

FEATURE E: Santa Barbara County, Carpinteria 7.5' USGS quad (1952, photorevised 1988); NE 1/4 of the NW 1/4 of Section 14. UTM coordinates: Zone 11, 263406 mE / 3813275 mN; 263411 mE/ 3813271 mN. Post mile 12.23, left (north) side. From the town of Carpinteria drive west on Highway 192 for approximately 4.5 miles. Appears to be the original 1924 feature. Feature E is a retaining wall made of dressed sandstone and mortar. The sandstone blocks are two courses high. Measurements: 22 ft (l) x 18 in (h). Portions of the wall at both ends have been damaged.

FEATURE C: Santa Barbara County, Carpinteria 7.5' USGS quad (1952, photorevised 1988); NW 1/4 of the SE 1/4 of Section 14. UTM coordinates: Zone 11, 263531mE / 3812464mN. Post mile 12.98, right (northwest) side. From the town of Carpinteria drive west on Highway 192 for approximately 4 miles. Feature C is a concrete retaining wall and appears to be the original 1924 feature. 2 ft x 6 ft boards used as forms. Measurements: 102 ft (l) x 20 ft (h) x 10 in (w).

State Number: CA-SBA-3622H
Agency Number:
Temporary Number: MS-192



A PORTION OF
SANTA BARBARA 7.5' QUADRANGLE

N
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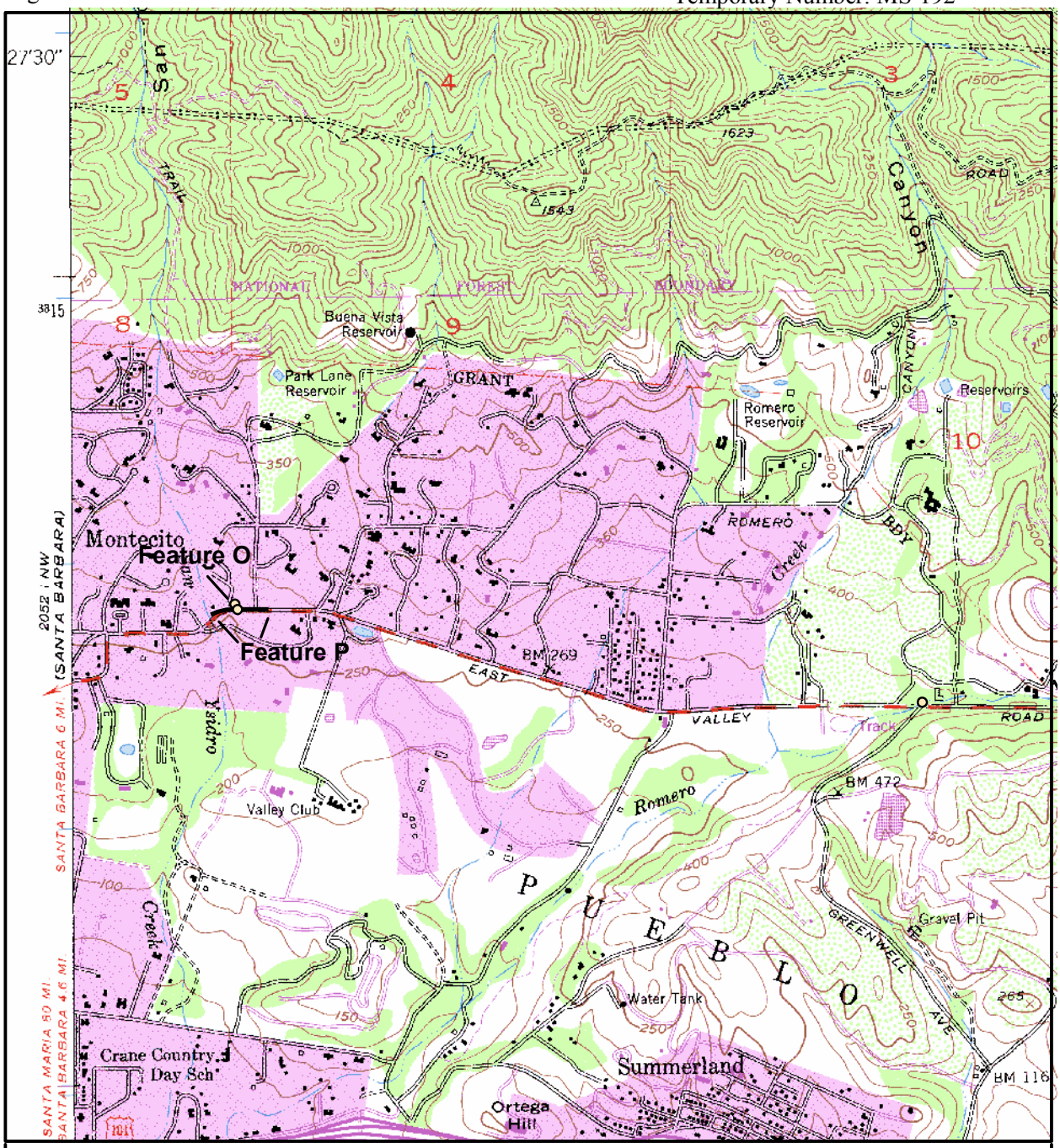
0 0.5 1 2 km

0 0.5 1 2 miles

SCALE 1:24000

State Number: CA-SBA-3622H
Agency Number:
Temporary Number: MS-192



A PORTION OF
CARPINTERIA 7.5' QUADRANGLE

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W E
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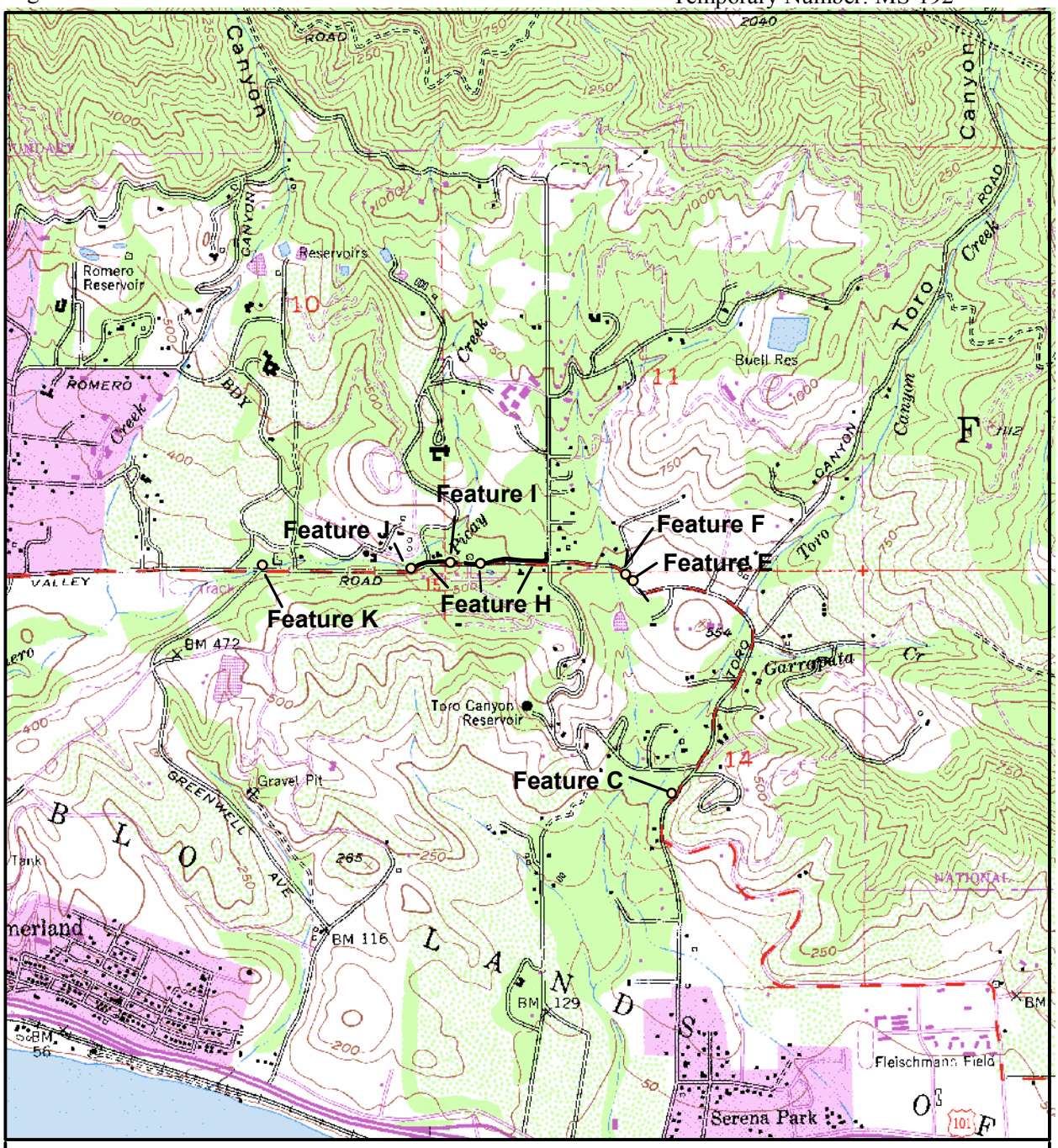
0 0.5 1 2 km

0 0.5 1 2 miles

SCALE 1:24000

State Number: CA-SBA-3622H
Agency Number:
Temporary Number: MS-192



A PORTION OF
CARPINTERIA 7.5' QUADRANGLE

N
W E
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0 0.5 1 2 km

0 0.5 1 2 miles

SCALE 1:24000

UPDATE

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-42-003622
HRI #
Trinomial CA-SBA-3622H
NRHP Status Code 6Z
Other Listings
Review Code Reviewer Date

*Resource Name or # (Assigned by recorder) OS-192, MS-192

P1. Other Identifier: State Route 192

*P2. Location: ☒ Not for Publication ☐ Unrestricted *a. County Santa Barbara
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Santa Barbara and Carpinteria Date 1995 (see accompanying Primary Record forms for individual features)

c. Address State Route 192, Post Mile 0.0 to 21.06

d. UTM: (give more than one for large and/or linear resources) Zone 11; _____mE/ _____mN

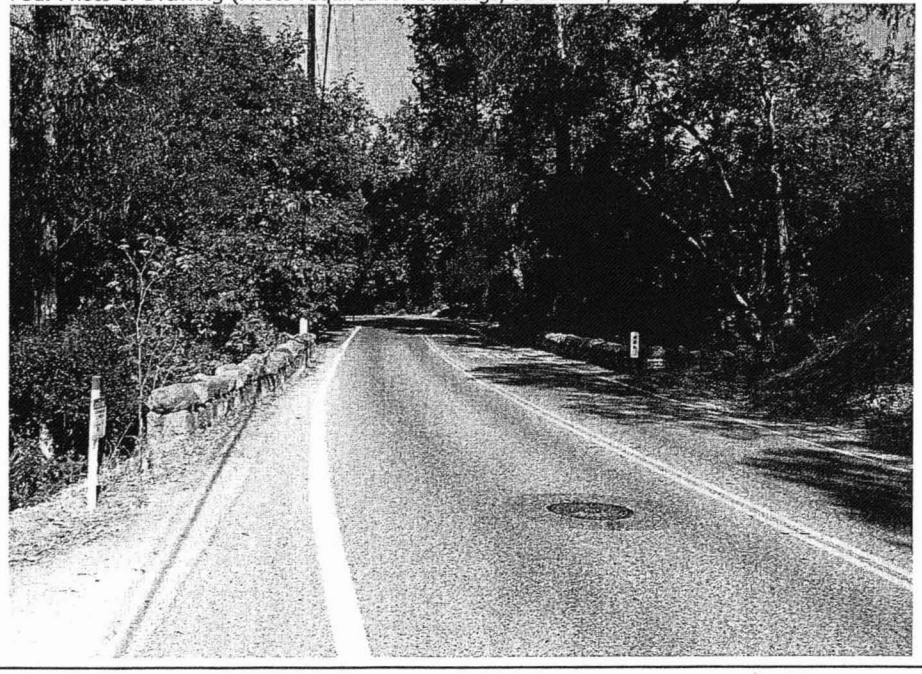
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
See accompanying Primary Record forms for specific locational information for each resource.

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
This form addresses a total of 47 stone masonry engineering features located within the State Route 192 right-of-way that are historically associated with the roadway. The findings presented below incorporate the results of a previous study of highway-related features conducted in 1999 (Mikkelsen et al. 2001) with an updated field survey of highway-related dressed sandstone engineering features conducted in 2005 (JRP 2005). State Route 192 is a 21-mile long highway that roughly parallels the east/west coastline between Highway 154 on the west and Highway 150 on the east. State Route 192 was created in 1933 from various county roads, and winds along the foothills of the Santa Ynez Mountains through the communities of Goleta, Santa Barbara, Montecito, and the Carpinteria Valley. The engineering features documented on this form date to the historic period and incorporate dressed sandstone or cobble masonry in their design. The features include six bridges, two retaining walls, 38 culverts, and a single "tree well". Eighteen of these features include above-grade components such as parapets or guardrails that are clearly visible from the traveled way. The remaining twenty-nine features are sub-grade structures, most of which are small-scale utilitarian structures such as culvert inlets and headwalls. (See Continuation Sheet)

*P3b. Resource Attributes: (List attributes and codes HP11 (Engineering Structure); HP19 (Bridge); HP37 (Highway)

*P4. Resources Present: ☐ Building ☒ Structure ☐ Object ☒ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Photograph 1. General view of State Route 192, facing west at PM 3.36 (Mission Creek Bridge).

*P6. Date Constructed/Age and Sources:
☒ Historic ☐ Prehistoric ☐ Both
Various, 1909-1929, see *B10. Significance for more detailed information

*P7. Owner and Address:
California Department of Transportation
District 5
50 Higuera Street
San Luis Obispo, CA 93401-5415

*P8. Recorded by: (Name, affiliation, address)
B. Larson/A. Walters/A. Rischel
JRP Historical Consulting,
1490 Drew Ave, Suite 110,
Davis, CA 95616

*P9. Date Recorded: July-September 2005

*P10. Survey Type: (Describe) Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") JRP Historical Consulting, "Historical Resources Evaluation Report, Replacement of Dressed Sandstone Culvert on State Route 192, Santa Barbara County, California (Draft)," December 2005

*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) _____

DPR 523A (1/95) *Required Information

Note; This record will be re-done to include the roadway only

P3a. Description (Continued):

The current study updates a previous study documenting the highway and many of its historic engineering features. In 1999 Far Western Anthropological Research Group inventoried the 21-mile length of State Route 192 as part of the Caltrans District 5 Transportation Enhancement Activity (TEA) Survey entitled "Cultural Resources Inventory of Caltrans District 5 Rural Highways, Santa Barbara County, California, Highways 1, 33, 101, 135, 150, 154, 166, 192, and 246." This survey identified 16 highway features that were subsequently assigned the trinomial CA-SBA-3622H. In 2005, JRP re-surveyed the entire 21-mile State Route 192 alignment in order to specifically record and evaluate dressed sandstone masonry features located within the highway right-of-way that are historically associated with the roadway. JRP identified a total of 47 features, including 11 that were previously included in the 1999 survey, and an additional 36 stone masonry features including bridges, retaining walls, and culverts. The remaining five features included in the 1999 study were located in the field but subsequently dropped from the current (2005) study because they were determined to have been constructed on private property and are not directly associated with State Route 192. The 47 features evaluated on this form are listed in the following table in ascending post mile order from west to east. Each feature is described individually on the attached Primary Record forms.

start in the repa

should be BSO s??

TABLE 1: Highway-Related Sandstone Masonry Engineering Features Located in State Route 192 Right-of-Way (Listed by post mile)

FEATURE NUMBER	POST MILE	FEATURE TYPE
JRP-25	2.81	Culvert
JRP-26	3.08	Culvert
JRP-27	3.36	Bridge (# 51-105, Mission Creek)
JRP-28	3.40	Culvert
JRP-29	3.67	Culvert
JRP-30	4.48	Culvert
JRP-31	4.93	Culvert
JRP-32	5.10	Culvert
JRP-33	5.14	Culvert
JRP-34	5.21	Culvert
JRP-35	5.25	Culvert
JRP-01	5.33	Culvert (with guardrails)
JRP-02	5.41	Culvert
JRP-03	5.48	Culvert
Feature Z	5.62	Culvert (with guardrails)
Feature Y	5.68	Retaining Wall (with parapet)
JRP-04	5.88	Culvert
JRP-05	5.89	Tree Well
JRP-06	5.98	Bridge (# 51-106, Sycamore Canyon Creek)
JRP-07	6.18	Culvert
JRP-08	6.25	Culvert (with guardrail)
JRP-09	6.28	Culvert (with guardrail)
JRP-10	6.41	Culvert (with guardrail)
JRP-11	6.43	Culvert
JRP-12	6.55	Culvert
Feature U	6.65	Culvert (with guardrail)
Feature T	7.12	Culvert
Feature S	7.39	Culvert (with guardrail)
JRP 14	7.51	Culvert
JRP 15	7.93	Culvert
JRP 16	9.00	Culvert (with guardrail)
Feature O	9.69	Culvert
JRP 17	10.54	Culvert (with guardrail)
Feature M	10.96	Bridge (# 51-110, Romero Creek)
JRP 19	11.11	Culvert
JRP 20	11.29	Culvert (with guardrail)

FEATURE NUMBER	POST MILE	FEATURE TYPE
JRP 21	11.36	Culvert
Feature J	11.69	Culvert
Feature I	11.78	Culvert
JRP 22	12.16	Bridge (# 51-111, Toro Creek)
Feature F	12.19	Culvert
Feature E	12.21	Retaining Wall

FEATURE NUMBER	POST MILE	FEATURE TYPE
JRP 23	12.29	Culvert
JRP 24	12.49	Bridge (# 51-112, Toro Canyon Creek)
JRP 37	14.80	Culvert
JRP 38	15.46	Culvert
JRP 36	15.52	Bridge (# 51-113, Arroyo Parida)

retaining wall

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LINEAR FEATURE RECORD

Primary # P-42-003622
HRI#
Trinomial CA-SBA-3622H

***Resource Name or # (Assigned by recorder):** OS-192, MS-192

L1. Historic and/or Common Name: State Route 192

L2a. Portion Described: ☒ Entire Resource Segment ☒ Point Observation **Designation:** OS-192, MS-192

***b. Location of point or segment:** (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map.)

State Route 192 roughly parallels the east/west coastline between State Route 154 on the west, and the Santa Barbara/Ventura County line on the east. It traverses the foothills of the Santa Ynez range along a course more or less parallel to U.S. Route 101, which is located several miles to the south. It is comprised of several former county roads, from west to east: Foothill Road, Stanwood Drive, Sycamore Canyon Road, East Valley Road, Toro Canyon Road, Foothill Road, and Casitas Pass Road.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

State Route 192 is a secondary highway. It follows an alignment that was acquired and developed over a nearly sixty-year period, but was essentially in place by 1933 when the road system was incorporated into the state highway system. The roadbed has a uniform width of 22 feet of paved surfacing; some areas have graded shoulders, others abut the adjacent property lines. The entire length of the highway was paved with asphalt in 1992. Appurtenant engineering structures that incorporate stone masonry in their design are described on the attached Primary Records.

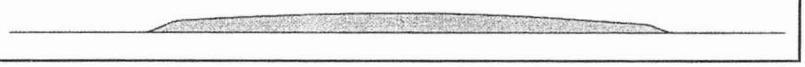
L4. Dimensions: (in feet for historic features and meters for prehistoric features)

a. **Top Width** 22 feet (average width of pavement)
b. **Bottom Width** n/a
c. **Height or Depth** 6 inches
d. **Length of Segment** 21.06 miles

L5. Associated Resources:

Stone masonry bridges, retaining walls, and culverts

L4e. Sketch of Cross-Section (include scale) **Facing:** n/a

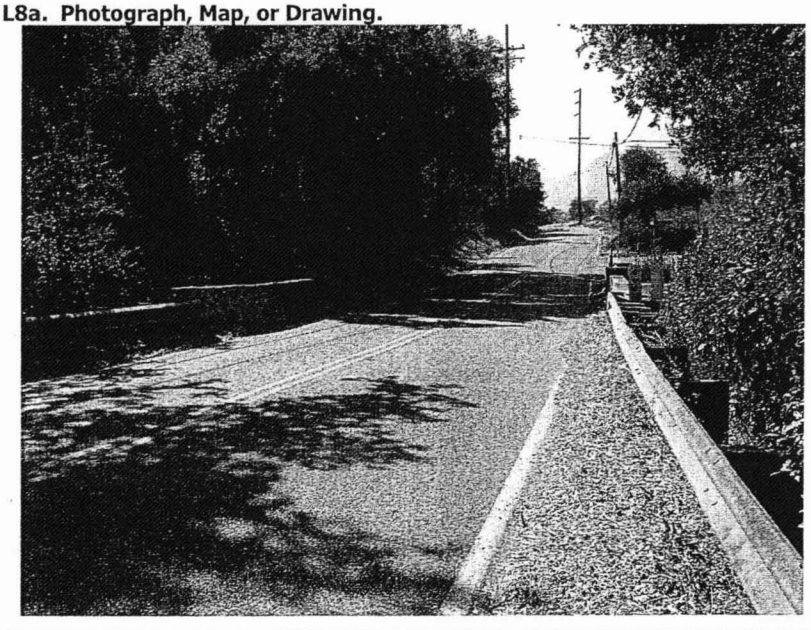


L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The western segment (P.M. 0.0-8.0) is hilly and residential, crossing several riparian corridors with an overstory of oaks and introduced species including eucalyptus. By P.M. 8.0 the area surrounding the highway is fully urban, both commercial and residential. The surroundings transition to oak woodland where the highway turns south at Toro Canyon (P.M. 12.0). As the highway enters the Carpinteria Plain (P.M. 14.0) the topography levels out and the surroundings take on a primarily agricultural character, although it does pass through suburban Carpinteria (mixed commercial and residential). After crossing Carpinteria Creek (P.M. 19.0) the road reenters the Santa Ynez foothills and becomes Casitas Pass Road for the remainder of its length (P.M. 21.06).

L7. Integrity Considerations: The county roads that comprise SR 192 were improved (i.e., paved) over about a twenty-year period between 1909 and about 1929. The paving usually consisted of oiled macadam or crushed rock in asphalt, and was typically 16 to 20 feet in width. Since that time, the entire roadway has been widened to an average width of 22 feet and in 1992 was resurfaced with modern asphalt paving. Although several of the appurtenant structures such as bridges, retaining walls, and culverts along SR 192 retain integrity, with the exception of location and setting, the highway itself does not.

L8a. Photograph, Map, or Drawing.



L8b. Description of Photo, Map, or Drawing:
Typical view of State Route 192, Post Mile 12.49, camera facing west.

L9. Remarks:

L10. Form prepared by: (Name, affiliation, address)
Bryan Larson,
JRP Historical Consulting,
1490 Drew Ave, Suite 110,
Davis, CA 95616

L11. Date: November 30, 2005

*Required Information

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
BUILDING, STRUCTURE, AND OBJECT RECORD

Primary # P-42-003622
HRI#
Trinomial CA-SBA-3622H

*NRHP Status Code: 6Z

*Resource Name or # (Assigned by recorder): OS-192, MS-192

B1. Historic Name: See B10. Significance
B2. Common Name: State Route 192
B3. Original Use: County road(s) B4. Present Use: State highway
*B5. Architectural Style: n/a
*B6. Construction History: (Construction date, alteration, and date of alterations) 1909-1929; See B10. Significance

*B7. Moved? ☒ No ☐ Yes ☐ Unknown Date: _____ Original Location: _____
*B8. Related Features: Bridges, retaining walls, culverts, tree well

B9. Architect: Various b. Builder: Various
*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.)

The historic resources evaluated for this study are unified by their construction history and design characteristics. Available evidence suggests that all were constructed by the County of Santa Barbara or contractors working on behalf of the county between 1909 and 1929 during the road building effort that first established State Route 192 as a permanent, paved highway. All of the features evaluated on this form – bridges, retaining walls, culverts, and a tree well – are constructed in whole or in part of locally procured dressed sandstone or cobblestone. The conclusion of this report is that the historic-period, highway related stone masonry features along State Route 192 do not meet the criteria for listing in the National Register of Historic Places as an historic district. Justifications for this conclusion are outlined below. (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes) HP11 (Engineering Structure); HP19 (Bridge)

*B12. References:
Please refer to individual footnotes.

B13. Remarks: None

*B14. Evaluator: Bryan Larson

*Date of Evaluation: November 30, 2005

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Location Maps

*Required Information

B10. Significance (Continued):

Historic Context

State Route 192 follows the alignments of several early roads through the foothills of the Santa Ynez Mountains. It begins on the west at the eastern outskirts of present day Goleta, continues eastward through the northern edge of Mission Canyon and the City of Santa Barbara, passes through the unincorporated town of Montecito, and finally descends into the Carpinteria Valley en route to its terminus at the Ventura county line. As early as the turn of the nineteenth century the confederation of county roads that now form State Route 192 had acquired the nickname "Foothill Road" and served as a principal artery between the foothill communities above the Santa Barbara coastline. The following is a history of the development of the route.

Highway Development in Santa Barbara County

The settlement patterns of Santa Barbara and its surrounding communities were largely influenced by the establishment of major transportation routes. During the Spanish and Mexican periods, and even into the American period, Santa Barbara remained somewhat isolated as the surrounding Santa Ynez Mountains posed a formidable barrier to long-distance travel. The Spanish established the first highway through Santa Barbara, El Camino Real, to connect the various missions established throughout Alta California. El Camino Real ran north from the Ventura Mission along the coast to Mission Santa Barbara, then northwest up the coast around Point Conception to La Purisima.[1] The route to the north was primitive and exceedingly difficult to travel, especially for horse-drawn vehicles; it was best traveled on horseback or by foot. El Camino Real's approach from the south was equally daunting. The road around Rincon Point followed the precipitous mountainside and travel was often hindered by high tides. Large sections of the road were regularly washed out.[2]

Meaningful improvements to the major routes through Santa Barbara had to wait until the 1860s. El Camino Real (also known as the Coastal Road) was adopted into the county system in 1861 and stage traffic commenced along the route between San Francisco and Los Angeles shortly thereafter. This road was the predecessor to today's U.S. Route 101, the principal coastal automobile route through most of California. In 1868, Santa Barbara businessmen organized the Santa Ynez Turnpike Road Company and constructed a toll road over San Marcos Pass, thus providing a much needed connection between Santa Barbara and Santa Ynez River Valley. The routing of San Marcos Pass Road was altered on numerous occasions, but modern State Route 154 generally follows the alignment of the road as it existed in 1898, the year the old toll road was adopted into the county system. In 1878, access to Santa Barbara from the south was improved with the construction of a county wagon road through Casitas Pass. A precursor to today's State Route 150, this highway provided an inland alternative to the coastal route around Rincon Point.[3]

The Good Roads Movement in Santa Barbara County

During the late nineteenth and early twentieth centuries, a Good Roads movement evolved in the United States as the nation transitioned from horse powered transportation to the automobile. At the time, roads in the country were in extremely poor condition, consisting mainly of dirt paths that alternated between dust bowls and mud bogs depending on the weather. The drive for better roads came initially from farmers, bicyclists, and eventually from automobile interests. Early milestones in the movement came in 1892, when a bicycle advocacy group, the League of American Wheelmen,

[1] In 1804, coinciding with the completion of the Santa Ynez Mission, a new route was established over Refugio Pass to the Santa Ynez Valley. An alternate route over Gaviota Pass was completed by the 1820s; this marks the approximate route of modern Highway 101.

[2] L. Mark Raab, "California Comprehensive Heritage Resource Management Plan: Santa Barbara County Element," prepared for the California State Office of Historic Preservation, October 1985, 39-40; Mason, *Thompson and West's History of Santa Barbara & Ventura Counties*, 272; Scott, "Carpinteria Historical Overview," 4.

[3] Dorene Clement, "Historic Resource Evaluation Report, San Marcos Pass Road, 05-SB-154, P.M. 3.1/31.2 05-37660," January 1993, 3, 5-7; Mason, *Thompson and West's History of Santa Barbara & Ventura Counties*, 135.

founded *Good Roads Magazine*, and in 1903, when St. Louis hosted the National Good Roads Convention. The Good Roads movement accelerated with the advent of the automobile and its rapid rise in popularity during the first decade of the twentieth century. Groups like the American Automobile Association and the National Grange took the lead in promoting better roads and the topic became a popular political issue. These groups advocated for federal support for highway construction yet national legislation failed and road improvement remained the enterprise of the states.[4]
California held its first Good Roads Convention in Sacramento in 1893 and three years later the Bureau of Highways recommended construction of north-south commercial routes and lateral routes to county seats. However, it was not until the creation of the California Highways Commission in 1909 that the state actually had the authority to construct and maintain roads. It was another two years until the first Highway Commission was appointed, which adopted the routes suggested by previous studies. The commission divided the state into seven districts and work began on a state highway system in 1912, though local roads remained the responsibility of the counties.[5]

In Santa Barbara County, the quality of roads had been a major topic of discussion as far back as the 1870s. In 1875, an article in a weekly Santa Barbara newspaper lamented that "it is not an open question, but a plain and undeniable fact, that the one pressing necessity of this city and county is the opening and grading of good roads in all parts of the county, and more especially that portion of the county which is most densely populated."[6] The road system in and surrounding Santa Barbara was gradually expanded and improved throughout the remaining decades of the nineteenth century, but public complaints about the quality of local roads continued as the county entered the automobile age during the first decade of the twentieth century. By and large, county roads at the time were still designed for horse-drawn vehicles such as stages, carriages, and freight wagons. That is, they were typically graded dirt roads, sometimes oiled or coated with a thin surface of gravel, that were susceptible to rutting, erosion, or washouts.

By the end of 1908, the agitation for good roads in Santa Barbara County had galvanized into a widespread and popular movement led by the Good Roads Committee and several other civic organizations. A major impetus for road building in the county was the passage of the statewide road improvement act of March 18, 1907. The act provided for laying out, constructing, straightening, improving, and repairing main public highways in all counties, and allowed the counties to approve and sell bonds to pay for such work. The county would appoint a highway commission to oversee the undertakings. The Santa Barbara County supervisors responded by appointing a highway commission comprised of George S. Edwards, John Parker, and G.J. Trott, all of whom were to serve two-year terms. In the spring of 1908 the County Highway Commission hired D.H. Dickinson, formerly of the Engineering Department of the Massachusetts Highway Commission, to take charge of engineering work conducted under the Act of 1907.[7]

On October 10, 1908, the county held an election for a bond measure designed to fund the construction of a system of highways throughout the county, most notably a main thoroughfare following the old El Camino Real route to be known as the Coast Road. The bond campaign occurred at the same time that Governor James Gillett was proposing and promoting a statewide bond initiative that would raise $18,000,000 for the construction of a state highway system. Under the statewide bond proposition, the state would issue and pay for the bonds, but the individual counties would be required to pay the interest upon the money spent within its boundaries. However, if the county should elect to build roads that would form part of the state highway system, it would not need to use state funds and therefore would therefore be relieved from repaying the interest from the bond.[8] Supporters of the initiative argued that a countywide bond was necessary to ensure economic prosperity for the county and improve the quality of life of its citizens, and to retain local control of highway construction and avoid a second layer of taxes deriving from a state highway bond. They also felt that implementation of a state bond proposition, which required approval of both houses of the legislature as well as by the

4 James J. Flink, *America Adopts the Automobile, 1895-1910* (Cambridge, Massachusetts: The MIT Press, 1970), 203-205, 208-211.
[5] Raymond Forsyth and Joseph Hagwood, *One Hundred Years of Progress: A Photographic Essay of the Development of the California Transportation System* (Sacramento: Signature Press, 1996), 11-13.
[6] "Our Roads," *Santa Barbara Weekly Press*, July 17, 1875.
[7] Board of Supervisors Minutes, Book K, March 2, 1907; Board of Supervisors Minutes, Book K, December 2, 1907.
[8] Letter from E.C. Cooper, Private Secretary to Governor Gillett, to Frank E. Kellogg, Chairman, Good Roads Committee, Chamber of Commerce, Santa Barbara, September 29, 1908, published in *The Morning Press*, October 2, 1908.

people of the state through an election, was at least years away and that a local bond would be more immediately beneficial.[9] Detractors argued that the county bond measure would put too much burden on the local taxpayer and focused too heavily on the construction of the Coast Road to the detriment of local roads.[10] With 2253 votes for and 2099 against, the bond issue failed to attain the two-thirds majority required for its passage and was defeated.[11]

The defeat of the countywide bond issue did not amount to a death knell for the nascent good roads movement. The general sentiment throughout Santa Barbara County remained that the construction and maintenance of good roads was indeed of vital importance. Even some of the most vocal opponents to the bond conceded that their opposition "was not a matter of principle but of policy," emphasizing that they disagreed with the specifics of the bond, not with the ideas behind it. The bond issue had received strong support in many parts of the county, including the Montecito and Carpinteria precincts, but was considerably less popular in the cities of Santa Barbara, Santa Maria and Lompoc, the latter registering 24 votes for and 577 against. The nearly unanimous opposition in Lompoc stemmed from the county highway commission's selection of a highway route that bypassed the city.[12]

Almost immediately following the bond election the good roads movement assumed a local, rather than countywide, focus, primarily through the establishment of a series of permanent road districts in various unincorporated areas of the county. These districts, authorized by the statewide road improvement act of 1907 and officially established by county ordinance, held the authority to issue bonds for road improvement work within its boundaries. On October 17, 1908, just one week after the defeat of the countywide bond measure, a large group of enthusiastic Montecito citizens met to discuss the formation of such a district. A committee of twenty Montecito residents, formed the following day, circulated a petition throughout the proposed district calling for the establishment of the Permanent Road Division of Montecito, whose purpose was to pave portions of the Coast Highway, San Ysidro Road, Hot Springs Avenue, and Valley Road within the boundaries of the district. Such improvements were necessary, according to the petition, "because said roads are principal arteries of travel and hauling, and without such improvement said roads become difficult or unfit for travel and hauling by reason of ruts, chuck-holes and hillocks, and by reason of dust in summer and mire in winter."[13]

One hundred and twelve landowners within the proposed district signed the petition. The Board of Supervisors approved the petition and passed Ordinance 330 on January 4, 1909, to form the Permanent Road Division of Montecito. The district extended from Sheffield Reservoir on the west to Picay Creek on the east, with its northern boundary following the township line (4N/5N) and its southern boundary following the coastline and Santa Barbara's northern city limits. On the same date an attorney acting on behalf of the Montecito division, George Gould, also submitted plans and specifications for improvements to six and a half miles of roads within the district, approximately one mile of which were along East Valley Road (SR 192). The other routes to be improved were the Coast Road, Hot Springs Avenue, and San Ysidro Road. Gould reported that the district would issue a bond to fund the estimated $50,000 project.[14] The Permanent Road Division of Montecito enjoyed the broad support of the Montecito citizenry and its bond passed by a wide margin in the special election of February 26, 1909. The following day *The Morning Press* announced that the bond faced "ridiculously futile opposition to splendid progressive work" and that "Santa Barbara rejoices with its beautiful suburb in victory."[15]

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[9] In fact, the legislature passed the first State Highway Bond Act, in the amount of $18 million, in 1909; voters approved it in 1910, and construction of the first section of state highway under the act, a segment of El Camino Real in San Mateo County, began in 1912.
[10] "This County Need Not Help State Roads If She Builds Her Own Highway System," *The Morning Press*, October 2, 1908; "Good Roads Committee Issues Appeal to Voters," *The Morning Press*, October 7, 1908; "Barker's Two Letters As Opposition Arguments," *The Morning Press*, October 7, 1908.
[11] "Good Roads Bond Issue Is Defeated By Large Margin," *The Morning Press*, October 11, 1908.
[12] "Good Roads Bond Issue Is Defeated By Large Margin," *The Morning Press*, October 11, 1908.
[13] Petition published in *The Weekly Press*, December 17, 1908: 7.
[14] Board of Supervisors Minutes, Book K, January 4, 1909; "Montecito After Her Good Roads," *The Morning Press*, January 5, 1909.
[15] "Montecito Good Roads Bonds Are Carried; Yes, 211; Noes, 16," *The Morning Press*, February 27, 1909.

The citizens of Montecito had hoped and predicted that their road district would serve as a model for other parts of the county, and that "the [good roads] movement will spread with rapidity as soon as the work of making splendid roads through Montecito shall have been accomplished."[16] Their aspirations were soon realized as similar districts began to form throughout the county. In the spring of 1909, good roads advocates in Mission Canyon, Carpinteria Valley, Goleta, and Lompoc began to meet, form committees, and formulate local strategies to fund and construct better highways. The Mission Road Division, serving the area north of Santa Barbara's corporate boundaries, formed on May 3, 1909. The Permanent Road Division of Goleta formed on July 6, 1909, and the Permanent Road District of Carpinteria on February 15, 1910. These districts, all of which partially encompass the SR 192 study area, eventually went on to pass bond issues valued in the tens of thousands of dollars for a variety of improvements. By the fall of 1909 the Montecito district was nearing completion of seven miles of macadam road and Goleta was about to construct eleven miles of asphalt road. Carpinteria at the time was planning the construction of ten to twelve miles of permanent highway, and the Mission district was about to vote to expend funds for four miles of permanent roads. Most of the construction efforts were focused along the Coast Road route which was being developed as the primary highway route through the county.[17]

Prior to the establishment of permanent road divisions, county road work was generally performed under a system of road districts that dated to the 1850s. Under this system, road work was funded by taxes paid by the residents of the district, and citizens were required to contribute labor or equipment to annually maintain local public roads. A county engineer or supervisor was assigned to oversee the work.[18] The advent of the local improvement committees, beginning with the founding of the Montecito Permanent Road Division in early 1909, changed both the funding mechanisms and construction practices involved in road improvement projects. Funds were raised through the sale of bonds and applied to projects within the permanent road division boundaries, which were different from the county road district boundaries. The county surveyor submitted plans and specifications for the roadwork to the Board of Supervisors, who in turn approved the plans and put a contract out to bid. Controlling costs was a priority, and construction projects under the various permanent road divisions' bond acts were almost invariably let to the contractor that submitted the lowest bid. The first major contract (in Montecito) was let to a Los Angeles firm, Pattillo Company, even though the bid of its only competitor, the locally-based firm Santa Barbara Grading and Paving Company, was only $1,000 higher. Later contracts tended to go to local firms, or were performed by day labor hired by the county, and supplies such as gravel, asphalt, and stone were procured from local quarries.

While the work of the local committees and road divisions was decidedly utilitarian – to build modern hard surfaced roads for ease of public travel and commercial hauling – the coming of the automobile and crowding of streets with commercial vehicles, both horse-drawn and motor driven, did not eliminate nostalgic visions of idyllic pleasure drives through Santa Barbara's and Montecito's famed arcadian countryside. In 1909, the city and county of Santa Barbara decided to set aside Mountain Drive, an east-west thoroughfare traversing the foothills above Santa Barbara and Montecito, as a dedicated scenic and pleasure drive. As opposed to the Foothill Road, which formed a primary artery through the foothills above and through Santa Barbara and Montecito and carried all manner of vehicular traffic, Mountain Drive was characterized as passing through largely unsettled and uninhabited territory and deemed not significantly beneficial to any agricultural, manufacturing, mining, or commercial interests. In July 1909, the Board of Supervisors passed Ordinance 338 which declared that "the road known as the Mountain Drive, extending from near the Old Mission in the City of Santa Barbara along the base and side of the Santa Ynez Range of Mountains, eastward to Montecito, is hereby set apart for the

[16] "Supervisors End Their Session," *The Morning Press*, January 6, 1909.

[17] "All Working for Good Roads," *The Morning Press*, March 23, 1909; "Matters of Infinite Import Transacted by Supervisors, *The Morning Press*, September 8, 1909; "Goleta Road Bonds to Be Sold; Improvement Will Be Rushed," *The Morning Press*, October 5, 1909; "Goleta Road Bonds Carry by Vote of Five to One," *The Weekly Press*, October 7, 1909; "County Road Prospect Pleases," *The Morning Press*, October 10, 1909; Board of Supervisors Road Book B: 538-542, 546-548.

[18] G.M. Gidney, Benjamin Brooks, and Edwin Sheridan, *History of Santa Barbara, San Luis Obispo and Ventura Counties, California* (Chicago: The Lewis Publishing Company, 1917), 193; Mason, *History of Santa Barbara & Ventura Counties,* 98. Until 1929, the survey area fell within three road districts: Road District 1, located east of Cold Springs Road, Road District 2, located to the west, and Road District 6, in the Mission Canyon area. On July 9, 1929, these the first and second road districts were consolidated into the 1st Road District. Board of Supervisors Minutes, Book 1, July 9, 1929.

exclusive use of horses and light carriages." Agricultural, freight, mining, and commercial vehicles were expressly forbidden; offenders were subject to fines ranging from $5 to $25.[19] More than a decade later, in 1920, one writer made this glowing comment about Mountain Drive: "...one road particularly compares favorably with any scenic boulevard in the state. This road...climbs up the hills to the north of Santa Barbara in ever increasing height until, at the summit, one of the most wonderful views to be had in California is disclosed."[20]

By late 1912, the first round of highway construction in the study area had been all but completed and building campaigns in this part of the county slowed markedly. The county took the opportunity to pass several ordinances designed to protect its new roads. The first, Ordinance 358, passed in November 1912, banned vehicles with traction engines or flanges on the wheels from traveling on paved county roads. It also made it illegal for vehicles to destroy, damage, or injure gutters, culverts, or bridges on county roads. Ordinance 364, passed in October 1913, was designed to protect ornamental and shade trees along county highways making their damage or removal a punishable offense subject to fines or jail time.[21] Unfortunately, county legislation could not protect its roads from the forces of nature. Over the weekend of January 25-26, 1914, Santa Barbara County was inundated by record rainfall followed by massive flooding. Channels and creeks throughout the county overflowed their banks and the ensuing floods washed out dozens of miles of roads and numerous bridges. In Montecito, old Spanishtown suffered the worst, as rushing waters from Montecito Creek washed away frame buildings along a section of Valley Road, and destroyed a 75-foot segment of the roadway itself.[22]

The storm caused widespread destruction throughout the county, with damages totaling hundreds of thousands of dollars. Although many miles of newly paved roads were destroyed, most of the losses occurred at bridge approaches and where rushing watercourses intersected the roads at right angles. In testament to the county's paving policies of the previous years, most of the permanent roads held up remarkably well, including those located within the Montecito and Goleta districts. Montecito's bridges also fared well – all of its permanent bridges survived.[23]

Even after nearly a decade of concerted road building in Santa Barbara County, in the eyes of many the work was far from complete. In fact, the demands made by heavier loads and larger automobiles and trucks outstripped the investments made and required more and better road engineering. These sentiments are echoed in statements by County Supervisor Sam Stanwood, issued in the Santa Barbara *Morning Press* in the summer of 1917:

> "The truth is, in the past five years we have progressed about fifty years in our demands upon the roads. Where formerly a horse and buggy would occasionally jog along the county highway, and no load heavier than a cord of wood or a ton or two of hay would be hauled, now everybody is using the roads...The popularity of the automobile is the chief cause of worry for those charged with maintenance of public thoroughfares."[24]

Stanwood's solution was to build roads to permanent standards using durable surfacing (pavement), even if it was more expensive to the taxpayer than the less costly, temporary "make-believe surfacing that will break to pieces very shortly under modern traffic."[25] Stanwood did not elaborate on what he meant by "make-believe" surfacing, but he was likely

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[19] Notice of Ordinance No. 338 published in *The Morning Press*, July 14, 1909; Board of Supervisors Road Book B: 542-543.
[20] Ben Blow, *California Highways: A Descriptive Record of Road Development by the State and by Such Counties as Have Paved Highways* (San Francisco, 1920), 239.
[21] Board of Supervisors Road Book B: 612-613.
[22] Several pages of the January 27, 1914, issue of *The Morning Press* were devoted to coverage of the flooding. See for example: "Storm King Gives Beautiful Santa Barbara Cruel Blow"; "Old Town Wiped from Montecito Map"; "Loss to County Roads and Bridges as Reported by Surveyor Flournoy"; "Paved Roads Stood Well Under Strain"; and "Only One Way to East and Montecito."
[23] "Paved Roads Stood Well Under Strain," and "Loss to County Roads and Bridges," *The Morning Press*, January 27, 1914.
[24] Sam Stanwood, quoted in "Why Roads Do Not Keep Up to Standard, Timely Observations on Highway Conditions by Stanwood," *The Morning Press*, Santa Barbara, August 1, 1917.
[25] "Why Roads Do Not Keep Up to Standard," *The Morning Press*, August 1, 1917.

referring to oiled macadam, which was the most common paving material in the area at the time. He called specifically for action in Mission District, which was experiencing a marked increase in vehicular traffic.

Whether or not they bore any direct impact on the county's road building program during the late 1910s, Stanwood's remarks coincided with a second burst of road improvement activity in the communities of Santa Barbara, Montecito, Carpinteria, Goleta, and elsewhere throughout the county. The early impetus was on bridge building. In 1915, county voters approved a bond issue for the construction of 26 bridges on the Coast Road which the State Highway Commission was building as part of its state highway along the old El Camino Real route. In exchange for the new state highway, the county was obligated to build the bridges along the route to standards set by the state. The highway was completed the following year and accepted into the state highway system as State Route 2 (it later became U.S. Highway 101).[26] During the summer of 1916, the Board of Supervisors called for the construction of at least half a dozen bridges throughout the county that were based on the designs of Mayberry & Parker, a Los Angeles-based architectural engineering firm. These bridges included reinforced concrete bridges on Foxen Road across Cat Canyon Creek and on Modoc Road across Arroyo Burro Creek, a steel bridge with reinforced concrete abutments on San Julian-Las Cruses Road across Gaviota Creek, and a stone bridge across Rattlesnake Creek at the head of Rattlesnake Canyon. During the summer of 1916, Mayberry & Parker also designed bridges along East Valley Road for the Arroyo Toro Creek, Oil Well Creek, and Romero Canyon Creek crossings.[27]

After 1916, County Surveyor Owen H. O'Neill replaced Mayberry & Parker as the chief designer of county bridges. O'Neill, a civil engineer by trade who worked the Santa Barbara County Surveyor's Office between 1911 and 1915, was elected County Surveyor in 1914, assumed the post in 1915, and retained the position until his retirement in 1946.[28] The county bridge building program under O'Neill progressed at a rapid rate because of an accelerated promgram of permanent road construction following World War I. He designed plans and specifications for dozens of contractor-built county bridges throughout the remainder of the 1910s and the 1920s. Some of O'Neill's earlier bridge designs, all from 1918, include:

- A stone arch bridge on Ashley Road over Cold Springs Creek, completed by contractor J. P. Arroqui in December;[29]
- A reinforced concrete bridge on Sheffield Drive over Picay Creek, built by Charles J. Ericksen;[30]
- A reinforced concrete bridge on Riven Rock Road near McCormack Place (builder unknown);[31]
- A reinforced concrete bridge with abutments and wingwalls on Sheffield Drive over Romero Creek, completed by A. A. Lemmon in December;[32]
- Three wood truss bridges on San Julian-Jalama Road, exact location and builders unknown.[33]

The initial era of permanent road division bonding for road improvements had all but ended by 1913, and the county reverted to its previous funding mechanisms under the road district system. Although the funding practices changed, the county retained many of the general principles that it developed during the 1909-1912 period. Controlling costs continued to be a priority. General specifications and plans for the design of pavements, road beds, drainage features, and bridges

[26] Scott, "Carpinteria Historical Overview and Architectural Inventory," 4; Raab, "California Comprehensive Heritage Resource Management Plan: Santa Barbara County Element," 40.
[27] Board of Supervisors Minutes, Book P, June 6, 1916; Board of Supervisors Minutes, Book P, August 31, 1916.
[28] Alice Catt Armstrong, ed., *Who's Who in California, 1955-56* (published by author, 1955), 10; Michael James Phillips, *History of Santa Barbara County, California, From Its Earliest Settlement to the Present Time*, Volume I (San Francisco: The S.J. Clarke Publishing Co., 1927), 340-341.
[29] Board of Supervisors Minutes, Book Q, June 10, 1918; Board of Supervisors Minutes, Book Q, July 1, 1918; Board of Supervisors Minutes, Book R, December 2, 1918.
[30] Board of Supervisors Minutes, Book Q, July 1, 1918, and August 5, 1918.
[31] Board of Supervisors Minutes, Book R, September 16, 1918.
[32] Board of Supervisors Minutes, Book R, September 16, 1918; Board of Supervisors Minutes, Book R, December 2, 1918.
[33] Board of Supervisors Minutes, Book R, September 16, 1918.

were developed by the county surveyor's office; private contractors bid on the jobs, and the Board of Supervisors issued contracts. The low bidder invariably won the contract, even for bridge projects. All contracts within the survey area appear to have been let to local firms, with the exception of at least one project that the county completed using local laborers and its own equipment, and used building materials procured at nearby sites.

Construction History of State Route 192

State Route 192, the subject of this study, is a secondary state highway whose purpose has been to serve local traffic in the foothills above the Santa Barbara coastline. The route consists of a half dozen separate former county roads that traverse approximately twenty-one miles of foothills between Goleta and Mission Canyon on the west and Carpinteria and Casitas Pass on the east. The rights-of-way for these roads, which currently bear the names Foothill Road, Stanwood Drive, Sycamore Canyon Road, East Valley Road, Toro Canyon Road, and Casitas Pass Road, were incrementally adopted by the county over a period of more than 50 years. These roads were built to permanent standards, i.e. paved, over a span of more than two decades, beginning with improvements in the Montecito district in 1909. By the time the Division of Highways adopted the route into the state highway system as Route 150 on August 16, 1933, it had been paved for most of its length. State Route 150 was renumbered State Route 192 in 1964.[34]

Santa Barbara County first began to acquire rights-of-way for the roads that would eventually form State Route 192 as early as the 1870s. These rights-of-way were acquired from local property owners and typically followed existing non-dedicated traveled ways, usually paralleling the edges of property lines of adjacent land owners. The result was a patchwork of meandering public and private thoroughfares. By the 1870s, the county waged a more aggressive campaign over the next few decades to have the more important rural routes dedicated as public highways through donation or outright purchase. The county's earliest acquisitions along the route included sections of Sycamore Canyon and East Valley roads in the vicinity of Spanishtown.[35] Most of the highway's present routing was established by the turn of the century, although the county continued to acquire rights-of way for several new road segments and to widen or realign existing roads in subsequent decades. The right-of-way for the portion of Stanwood Drive between Sheffield Reservoir and Parma Canyon (approximate post miles 4.3 to 5.3), was acquired in the early 1910s, as was a three mile segment of Foothill Road, between Toro Canyon Road and Linden Avenue (approximate post miles 14.5 to 17.5). The county established the last stretch of the highway, a two-mile section of Goleta-Foothills Boulevard that forms the western extreme of the study area, in 1930-31. The present routing of State Route 192 very closely follows the alignment of the original state highway as it came into the system in 1933.[36]

The earliest permanent road construction efforts on future State Route 192 began in 1909, within the Montecito Permanent Road Division. In February the Board of Supervisors approved and adopted plans and specifications for construction of six miles of road within the division. The plans were prepared by County Surveyor Frank Flournoy, who served in that position from 1885 to January 1, 1915. The plans called for macadam pavement sixteen feet wide, averaging six inches in depth and coated with a surface of asphaltic oil. The Pattillo Contracting Company of Los Angeles won the contract with a low bid of $46,000, outbidding its only competitor, Santa Barbara Paving and Grading

[34] Highway 150 originally included present-day State Route 154, the highway over San Marcos Pass to Santa Ynez Valley. Former State Route 150, also known as Legislative Route 80, became two separately numbered highways in 1964: Routes 154 and 192.

[35] Mason, *Thompson and West's History of Santa Barbara & Ventura Counties*, 189, 217; Board of Supervisors Minutes, Book B: 343, September 13, 1871; Santa Barbara County Recorder's Office, Deeds Book T: 399, December 6, 1878.

[36] USGS, *Goleta, California,* 1/62500 scale quadrangle, October 1903; USGS, *Santa Barbara Special Map*, 1/62500 scale quadrangle, November 1903 (reprinted February 1909); USGS, *Ventura, California*, 1/62500 quadrangle, February 1904 (reprinted March 1910); Santa Barbara County Recorder's Office, Deeds Book 138:107, July 15, 1911; Santa Barbara County Recorder's Office, Deeds Book 116: 584, July 18, 1912; O.H. O'Neill, County Surveyor, "Map of a Portion of the Proposed Goleta Foothill Boulevard, Santa Barbara County, California," May 1930; Owen H. O'Neill, "Goleta Foothill Boulevard, Second Road District, Proposed Right of Way Thru Rutherford Park Tract, City of Santa Barbara," December 1930; O.H. O'Neill, "Plan and Profile of Goleta Foothill Boulevard, Section-1, From Ontare Road to Cienigitas Ave.," March 1930; Owen O'Neill, "Plan and Profile, Goleta Foothill Blvd., Sect. 2," February 1931.

Company, by just under $2,000. The contract included a one-mile stretch of East Valley Road (SR 192) extending east from Montecito Creek Bridge through Spanishtown and Montecito Village (approximately post miles 8.0 to 9.0).[37] After several months of delays, the Pattillo Contracting Company finished its work in Montecito in early 1910, but not before the company had bankrupted itself doing so. County forces completed the work.

With the Montecito Permanent Roads Division's funds exhausted, there was little or no additional road improvement work in the survey area for throughout 1910 and well into the next year. On July 1, 1911, however, the Montecito division held a second election to issue $40,000 in bonds; the measure passed by a large margin.[38] The bond financed the construction of 5.5 miles of asphalt macadam pavement to a width of 16 feet and a thickness of six inches. Road segments within the study area included the stretches of Sycamore Canyon Drive and East Valley Road between Cold Springs Road (then known as Palm Avenue) on the west and Montecito Creek Bridge on the east (approximate post miles 6.5 to 8.0); and a second segment extending west from Sheffield Road (post miles 9.0 to 10.5) Unlike the roadwork performed under Montecito's 1909 bond act which used private contractors, the Board of Supervisors decided that the 1911 bond would be used to hire local day laborers to perform the grading and paving operations. Supervisor Howe S. Deaderick of Carpinteria was called upon to oversee the work.[39]

In the summer of 1912, the Board of Supervisors formed the Permanent Road Division of Carpinteria which passed a $50,000 bond issue to improve several miles of roads in the district. The boundaries of the Carpinteria division covered the Toro Canyon Road, Foothill Road, and Casitas Pass Road sections of State Route 192. Although most of the planned improvements were on the Coast Road, the bond did provide for the grading and paving of 3.5 miles of Casitas Pass Road (SR 192) near the Ventura county line. The measure passed overwhelmingly with a vote of 233 for and one against. Santa Barbara Grading and Paving Company won the contract for construction of 9.1 miles of road with a low bid of $78,940. Unlike the Montecito roads, which were paved with macadam topped with hot oil, the Carpinteria division elected to employ what they thought was a more durable method of paving in which crushed rock was rolled into a layer of hot crude asphalt. The Higgins Mine near Carpinteria provided the asphalt for the contract.[40]

In 1915 the County Highway Commission proposed improvements to three miles of Foothill Road and one mile of Casitas Pass Road consisting of grading and paving a twelve-foot wide roadbed with four-inch thick asphalt concrete and bituminous macadam surfacing. The county also improved sections of Toro Canyon Road in 1917, then again in 1919. For the latter, the Board of Supervisors authorized Supervisor Deaderick to purchase materials and hire local workers and teams to complete the work for $6,166. No further details about the project were given.[41]

Other contracts in the Santa Barbara, Carpinteria, and Montecito areas followed. On February 7, 1921, the Board approved plans for grading, draining, and paving portions of certain roads, streets, and avenues with Road Improvement District Number 2, which encompassed the portion of the study area west of Cold Springs Road (P.M. 7.0). The low bidder, Charles Richardson, a road contractor based in Carpinteria, won the $108,800 contract.[42] Later that spring, the

[37] Board of Supervisors Minutes, Book K, February 1, 1909; "Supervisors Meet and Transact Much Business," *The Morning Press*, May 4, 1909.
[38] "Notice of Bond Election, Permanent Road Division of Montecito," *The Morning Press*, June 6, 1911; Board of Supervisors Minutes, Book L, June 5, 1911.
[39] "Notice of Bond Election, Permanent Road Division of Montecito," *The Morning Press*, June 6, 1911; "Montecito Roads Will Be Built by County by the Day," *The Morning Press,* August 29, 1911; Board of Supervisors Minutes, Book L, June 5, August 22, and September 5, 1911.
[40] Board of Supervisors Minutes, Book M, June 17, July 22, and September 4, 1912; "Carpinteria Road Work is Let," *Carpinteria Valley News*, September 6, 1912; "Former Supervisor Denounces Condition of County Highways," *The Morning Press*, August 8, 1911; "Facts About the Valley Pavement," *Carpinteria Valley News*, March 7, 1913.
[41] "Here is Dope Sheet on Proposed Good Roads," *Carpinteria Valley News*, August 20, 1915; "Improving the Foothill Road," *Carpinteria Valley News*, August 3, 1917; Board of Supervisors Minutes, Book R, January 20, 1919; Board of Supervisors Minutes, Book R, May 6, 1919.
[42] Board of Supervisors Minutes, Book S, February 7, 1921.

county ordered the following work in Carpinteria: installation of 6½-inch thick pavement, composed of crushed rock foundation and asphaltic concrete wearing surface, and all necessary drainage structures and finished sub-grade including curbs. Again, Richardson won the contract with a low bid ($94,000).[43] In October 1926 the county surveyor prepared plans to grade, drain, and pave with six-inch thick macadam (to a width of 20 feet) a 3,200 foot segment of Stanwood Drive.[44] And finally, during the winter of 1926-27 Richardson constructed 4,400 feet of roadway along an unnamed stretch of East Valley Road. This contract entailed grading and paving a 20-foot wide highway with a minimum depth of two inches of Carpinteria asphaltic concrete.[45]

As a cumulative result of these various road construction projects, most of the mileage of the county roads that now comprise State Route 192 had been improved to permanent standards by the end of the 1920s. In addition to these ongoing road building efforts, the twenty-year period between 1909 and 1929 was also marked by the construction of numerous bridges along the highway. The first came in 1909 when the Board of Supervisors ordered Surveyor Flournoy to design a bridge for Valley Road over San Ysidro Creek (2nd Road District). Two years later, the county authorized the construction of two more bridges, also of Flournoy's design, one carrying Casitas Pass Road over Carpinteria Creek, the other carrying East Valley Road over Montecito Creek at Spanishtown.[46] The San Ysidro Creek and Carpinteria Creek bridges have since been replaced with modern structures, and the Montecito Creek bridge appears to have been completely modernized.

As mentioned previously, Mayberry & Parker designed three bridges for East Valley Road in 1916: a reinforced concrete bridge across Arroyo Toro Creek, a reinforced concrete bridge across Oil Well Creek, and a concrete arch bridge across Romero Canyon Creek.[47] The Arroyo Toro Creek and Oil Well Creek bridges appear to have been replaced, but the Romero Creek Bridge (Bridge 51-110, P.M. 10.96) still stands.[48] Contractor F.F. Moore submitted the low bid of $7,295 and won the contract for construction of the Romero Creek Bridge on August 31, 1916, and soon thereafter commenced work on the sandstone-faced concrete arch bridge. Moore defaulted on the contract and county forces took over the job in the following winter, completing it in August 1917. The bridge, which retains a remarkable degree of integrity to its original condition, was determined eligible for the National Register of Historic Places in 1986 as an important example of bridge engineering by a significant designer.[49]

The first bridge that County Surveyor Owen O'Neill designed within the study area is the Sycamore Canyon Creek Bridge (Bridge #51-106, P.M. 5.98), constructed by contractor John P. Arroqui for the low bid of $2,985. Arroqui was a Santa Barbara native who worked his entire professional life as a stone mason and masonry contractor who built bridges on numerous local roads as well as on private estates.[50] The Sycamore Canyon Creek Bridge, was constructed in 1921 and

[43] Board of Supervisors Minutes, Book T, April 4, 1921; April 18, 1921.
[44] Board of Supervisors Minutes, Book Y, October 4, 1926; October 18, 1926.
[45] Board of Supervisors Minutes, Book Y, November 8 and December 6, 1926; January 3 and March 7, 1927.
[46] Board of Supervisors Minutes, Book K, March 1, 1909; Board of Supervisors Minutes, Book L, June 5 and June 7, 1911.
[47] Board of Supervisors Minutes, Book P, June 6, 1916; Board of Supervisors Minutes, Book P, August 31, 1916.
[48] These two bridges probably no longer stand. The Caltrans Log of Bridges on State Highways lists the bridge at Toro Canyon Creek as constructed in 1929; the County Board of Supervisors records offer a construction completion date of March 1929. It is probable but not certain that Toro Canyon Creek and Arroyo Toro Creek refer to the same watercourse. Similarly, the Caltrans bridge log does not include a facility that carries Route 192 (East Valley Road) over Oil Creek, nor does a creek of that name appear on maps reviewed for this project. It is therefore unclear to which facility this bridge crossing refers. Additionally, both bridges in question were built in 1916; the only Route 192 bridge that carries a construction date of 1916 (according to the Caltrans Bridge Log) is Romero Canyon Creek Bridge, which still stands.
[49] Board of Supervisors Minutes, Book Q, August 6, 1917; Board of Supervisors Minutes, Book P, August 31, 1916; "Progress on Bridges Reported by O'Neill," *The Morning Press,* Santa Barbara, December 5, 1916; "Bridges Finished," *The Morning Press*, Santa Barbara, August 7, 1917; Stephen D. Mikesell, Arch Bridge Rating Sheet for Bridge #51-110, Romero Creek Bridge, August 15, 1986; JRP Historical Consulting, "Caltrans Historic Bridges Inventory Update: Concrete Arch Bridges," Volume IIB, April 2004.
[50] "John P. Arroqui," (obituary), *Santa Barbara News-Press*, June 12, 1969.

still stands; it is one of the few remaining stone masonry arch bridges in Santa Barbara County. It was determined eligible for the National Register in 2003 as a rare and important example of its type.[51]

In 1922, the County Board of Supervisors ordered O'Neill to inspect the existing bridge on Foothill Boulevard (Highway 192) over Santa Monica Creek. The purpose of the inspection was to determine whether the bridge needed repair or replacement. O'Neill determined the latter and on July 22, 1922, the Board called a special session to discuss the replacement of the bridge. O'Neill presented specifications, plans, profiles, and cross sections for a reinforced concrete bridge deck with stone railings, abutments, and wingwalls. The Board approved and adopted the plans and put them out to bid. Five contractors competed for the contract with E.H. Hunt, the lowest bidder, winning the $3,740 contract. Hunt completed the bridge on October 2, 1922, whereupon the Board accepted it as constructed in accordance with plans and specifications.[52]

The design of O'Neill's bridge over Santa Monica Creek is of interest because at least five other bridges built along State Route 192 during the 1920s mimicked its basic design, materials, and appearance.[53] The hallmark characteristics of this bridge type include a concrete T-beam road deck, mortared sandstone ashlar abutments with flared wingwalls, and guardrails constructed of either sandstone ashlar blocks or cobblestone. The other bridges along Route 192 known to have been designed in this manner were located at Mission Creek (P.M. 3.36), Toro Creek (P.M. 12.16), Toro Canyon Creek (P.M. 12.49), Arroyo Parida (P.M. 15.52), and Carpinteria Creek (P.M. 19.09). The bridge decks, concrete T-beam structures, had been widely used in bridge design throughout Santa Barbara County since the mid 1910s, and were probably selected for their cost, strength, and ease of construction. The cost of the Santa Monica Creek bridge, about $3,700, is comparable to the $3,000 price of the Sycamore Canyon Creek bridge that O'Neill designed a year earlier. O'Neill's motivation for using stonework in the designs is not known, but in keeping with the county's general building practices of the time it was probably because the materials were locally available and inexpensive to procure. The Santa Monica Creek bridge has also been thoroughly remodeled and all of its original stonework has been removed, and Caltrans replaced the Carpinteria Creek Bridge with a concrete box girder bridge in 1977 and removed all stonework. The other four bridges modeled after the Santa Monica bridge – Mission Creek, Toro Creek, Toro Canyon Creek, and Arroyo Parida – still stand and retain a fair to high degree of integrity to their original appearances.[54]

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[51] Stacie Ham, "Survey and Evaluation of Masonry Arch Bridges," Caltrans, 2003; Board of Supervisors Minutes, Book T, May 2, June 6, and August 1, 1921.

[52] Board of Supervisors Minutes, Book U, May 18, July 22, August 7, and October 2, 1922. The construction history of the Santa Monica Creek Bridge (Bridge 51-114) is somewhat complicated by the fact that the Caltrans Bridge Log lists its construction date as 1928, which contradicts the 1922 date suggested by the Board of Supervisors minutes. The description in the minutes of the bridge as "a reinforced concrete bridge deck with stone railings, abutments, and wingwalls" is consistent with historic views of the bridge from the 1930s (see Figure 2). There is no mention of a bridge construction project on Foothill Boulevard over Santa Monica Creek in the Board of Supervisors minutes from 1928 (or any other year reviewed for this study). Further complicating matters is that the stone rails have been replaced with metal guardrails; the date of this work has not been determined. Weighing this evidence, it is the conclusion of this report that the Bridge Log is inaccurate and the actual construction date is 1922.

[53] Three bridges along State Route 192, San Roque Canyon (P.M. 1.77), San Ysidro Creek (P.M. 9.68), and Buena Vista Creek (P.M. 10.54) all have construction dates of 1965 or later. It is possible that the previous bridges at these crossings were of a type similar to the Santa Monica Creek Bridge, but this has not been verified. As described above, County Surveyor Flournoy designed a bridge for San Ysidro Creek in 1909, but reviewed documents did not detail the bridge type or materials.

[54] All five of these bridges are documented in Division of Highways photographs taken in 1934. The Carpinteria Creek bridge is no longer extant, having been replaced by a concrete structure in 1977. Of the remaining four, only the Toro Canyon Creek Bridge has suffered a substantial modification: the replacement of its upstream (north) stone guardrail with a poured concrete one. See: "Log of Condition Survey, Santa Barbara County, 1934," Binders V-SB-80-D and V-SB-80-E, Caltrans District 5 Records Resource Center, San Luis Obispo, California. However, it should be noted that all three of these bridges were inventoried and evaluated under the Caltrans Bridge Survey of the 1980s and found to be Category 5. The bridges all have reinforced concrete tee beam decks, a common bridge deck design throughout the state and in Santa Barbara County during the 1910s and 1920, with the earliest extant examples in the county dating to 1914. As typical examples of a common type it appears that they will remain Category 5 bridges (i.e., not eligible for listing in the National Register).

Research for this study did not uncover the construction histories of the Mission Creek and Arroyo Parida bridges, but the Caltrans Bridge Log gives construction dates for the bridges as 1928 and 1929, respectively. The histories of the Toro Creek and Toro Canyon Creek bridges, located at post miles 12.16 and 12.49, respectively, are documented in the minutes of the Board of Supervisors and plans drawn by County Surveyor O'Neill. On December 3, 1928, the Board announced that the county would receive sealed bids for the construction of five bridge decks, including such additional construction of walls, wingwalls, abutments, and floors as was called for in plans and specifications. Roy L. Richardson, of Carpinteria, submitted the low bid and was awarded the contract on January 7, 1929. Richardson's $9,114 contract required that he furnish all necessary tools, machinery, labor, and materials for the construction of the five bridges. The Board accepted the Toro Canyon and Toro Canyon Creek bridges as complete on March 4, 1929 (the other bridges, also completed in March were on Riven Rock Road, Hot Springs Road, and at an unspecified location).[55]

Of particular interest to the Toro Creek and Toro Canyon Creek bridges is that they appear to include two generations of stonework in their design. O'Neill's plans for the bridges, both dated October 1928, detail the installment of a reinforced concrete deck topped with "grouted cobble railings," which is an accurate representation of the bridges' appearances today. Interestingly, though, the plans called for the deck to be placed atop existing stone abutments that have been capped with concrete to raise the level of the bridge deck to meet the level of the road. This description also matches the current appearance of the bridge. The construction dates of the earlier stone abutments have not been identified, but are almost certainly related to the former bridges that crossed these creeks.

While bridge construction history along State Route 192 is relatively well documented, it is much more difficult to establish exactly when smaller and more numerous stone features such as drains, culverts and retaining walls were built. Historic documents such as Board of Supervisors minutes do not typically refer to the individual construction of these utilitarian features, instead broadly calling for the installation of "all necessary drainage structures."[56] These structures included side gutters, side drains, and cross drains which were designed to carry water falling upon the roadway and side slopes of cuts in order to keep the road bed and subsurface dry. They also included culverts that were required to carry small streams or water collected in side drains under a roadway to a natural watercourse. Culverts needed to be large enough to carry the channel's maximum volume of water under the roadway and to allow a small person to enter it and remove debris. Whether stone, concrete, or some other material was selected for the construction of these structures was typically determined by the availability and cost of the materials.

Although the individual histories of these utilitarian structures are not known, the historic record does provide compelling evidence that the construction date of any individual stone highway structure (with the exception of bridges) probably coincides with the construction date of that particular segment of roadway to permanent standards. For example, County Supervisor Deaderick, following an inspection tour of county roads in November 1909, reported that "the county has spent considerable money in the Montecito district reducing grades and building culverts and bridges, culverts alone costing $4000. But all culverts and bridges on these good roads are of permanent character, either stone or concrete."[57] In a similar vein, in December *The Morning Press* reported the following:

> Permanent bridge and culvert work is now the rule in Santa Barbara county. It has been found that wooden structures, requiring constant repair and replacing, are the most expensive in the final cost. Accordingly, whenever a new bridge has been required, and especially when permanent roads are being built, reinforced concrete or stone have been used in all underground work, and at all crossings. During the past few months, nearly $40,000 has been expended for bridges and culverts south of the mountains. Of this amount, $13,000 was spent in connection with the good road work in Montecito, including bridges

[55] The Caltrans Bridge Log list the dates of both bridges as 1928. Board of Supervisors Minutes, Book 1, December 3, 1928; January 7, 1929; March 4, 1929; April 1, 1929; O.H. O'Neill, "Plan of Reinforced Concrete Bridge over Torro Creek on East Valley Road in Montecito, Santa Barbara County, California," October 1928; O.H. O'Neill, "Plan of Reinforced Concrete Bridge on East Valley Road, About ½ Mile West of Torro Creek, Montecito, Santa Barbara County, California," October 1928.

[56] See, for example, Board of Supervisors Minutes, Book T, April 4, 1921.

[57] "Camino Real May Develop from Present Plans of Board," *The Morning Press*, November 6, 1909.

> and culverts on the coast highway, near Miramar, and on roads in the upper part of the valley...In Carpinteria, $5000 has been expended similarly...[58]

Board minutes reveal specific details for the construction of only one stone culvert in the study area, on Valley Road across the first ravine east of San Ysidro Road. The plans and specifications, developed by Flournoy, called for a culvert with a concrete top and stone pillars.[59] This may refer to the concrete and stone culvert over Oak Creek, located a few hundred yards east of San Ysidro Road (JRP 16, post mile 9.0).

Local Stone as a Building Material in Santa Barbara County

It would be difficult to overstate the historic and continuing importance of locally quarried stone as a building material in this portion of Santa Barbara County. Stone was used in the construction of many of the earliest buildings and structures in the county, specifically at Mission Santa Barbara. Many civic buildings and structures in downtown Santa Barbara are constructed of native stone, and the garden estates of Montecito regularly feature palatial buildings and expansive, handcrafted walls along the property boundaries. Locally quarried sandstone is the building material of choice for many of these architectural features.

Santa Barbara County has long been a producer of desirable, high quality sandstone. Construction grade sandstone is both durable and easy to work, making it a valuable choice for a building material. It is a sedimentary rock composed of sand grains bonded together with a cementing agent. The grains most typically consist of quartz, and the cementing substances are commonly iron oxide, clay, quartz, and calcite. It is the cementing substance that determines both the color and strength of the stone, and is therefore the most important factor in governing the value of the stone as a building material. Sandstone also covers a broad spectrum of colors, including shades of yellow, red, brown, gray, and blue and therefore can be used in harmony with a broad range of other stones and durable building materials such as brick.[60]

Most of the sandstone quarried in Santa Barbara County comes from the Santa Ynez Mountains and its foothills, which run generally east-west on a course parallel to the Santa Barbara coastline. The foothill deposits, situated in the general vicinity of Santa Barbara and Montecito, consist of massive sandstones near the surface atop underlying shales. This stone is typically a light buff color and is relatively easy to quarry as large boulders are often found at or near the surface.[61]

The adaptability, quality, and abundance of Santa Barbara sandstone have been key factors in its widespread use as a local building material since the late eighteenth century. The Spanish missionaries, whose presence in the area dates to 1786, relied heavily on sandstone in the construction of Mission Santa Barbara, especially in the features of its water system most of which was developed during the early 1800s.[62] The sandstone was quarried locally and worked, to a large extent, by the Native American neophytes resident at the mission. As related in 1883, "Mission Cañon furnished a very good sandstone, resembling granite, which could be easily split and hewn to the proper shape. Hundreds of Indians were engaged at this work alone."[63]

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[58] "Much Bridge Work Necessary to Complete Goleta Roads," *The Morning Press*, December 12, 1909.
[59] Board of Supervisors Minutes, Book K, July 7, 1909.
[60] Lewis E. Aubury, State Mineralogist, *The Structural and Industrial Materials of California*, Bulletin No. 38 (San Francisco: California State Mining Bureau, 1906), 115-116.
[61] Aubury, *Structural and Industrial Materials of California*, 133.
[62] Rebecca Allen and David L. Felton, *The Water System at Mission Santa Barbara* (California Mission Studies Association, Occasional Paper 1, December 1998). See also: Maynard Geiger, *A Pictorial History of the Physical Development of Mission Santa Barbara from Brush Hut to Institutional Greatness, 1786-1963* (Franciscan Fathers of California, 1963),
[63] *History of Santa Barbara County, California, with Illustrations and Biographical Sketches of its Prominent Men and Pioneers* (Oakland: Thompson & West, 1883), 27.

The use of building stone – sandstone in particular – continued in Mission Canyon throughout the nineteenth century. A series of archaeological studies in Mission Canyon during the 1980s recorded several small scale quarrying sites in the vicinity. Two studies identified fourteen quarry sites in the bedrock and along the terraces of Rattlesnake and Mission creeks, all to the north of Foothill Road (Highway 192). The small quarries included either sandstone boulders or bedrock exposures with drill holes or chisel cuts.[64] A third study documented a small quarry with wedge cut sandstones present, located near Mission Creek north of Foothill Road; the study dated this quarry to the late nineteenth century.[65]

In the decades that followed secularization of the missions and the transfer of California to Mexican, then American, rule, the population surrounding the mission slowly increased and spread into the surrounding areas. As discussed above, during California's Mexican period former Presidio soldiers began to acquire inexpensive pueblo lands east of the mission and founded a small settlement along Montecito Creek, called Spanishtown. Timber was relatively scarce, but the rocky terrain produced ample amounts of building stone. Using the stone also had the side benefit of clearing the land for agricultural use. Stone residences and outbuildings were a common, if not abundant, feature of the Santa Ynez foothills above Santa Barbara during this period.

By the turn of the century, sandstone quarrying in Santa Barbara County had become a viable commercial industry. In 1906, Santa Barbara was listed among the top half dozen sandstone producing counties in the state.[66] At this time there were at least five commercial sandstone quarries in operation in the county. Two of these were situated in the immediate vicinity of the project study area. The first, located in Mission Canyon near the City of Santa Barbara, was at the time owned by the Roman Catholic Church and may have been among the quarries used to provide stone for the original Santa Barbara Mission buildings; the other, owned by James Waring, a resident of Montecito, was located between Hot Springs and Cold Springs Creek, not much more than a mile north of East Valley Road (Highway 192) and Montecito Village. Peter Poole, a Scottish contractor, stonemason, and bridge builder who immigrated to the United States in 1885 and settled in Santa Barbara in the early 1890s, owned a stone quarry along Mountain Road. Although this has not been documented, these quarries may have provided stone used in construction of the county roads that became Highway 192.[67]

Local quarries are known to have provided an abundant source of sandstone for residential construction as European style stonework came to define the landscape of Montecito between the 1890s and the 1920s. The construction boom that began in Santa Barbara around the turn of the century coincided with an influx of European stonemasons who were hired by local residents to construct their villas, mansions, gardens, and property walls on the hillsides of upper Montecito. Some of the first stonemasons to come to Montecito area were of European descent, such as Englishmen Joseph Dover and Fred Henderson, Scotsman Peter Poole, German-Irish mason Philip Henley, and Italians John and Stefano Goggia, all of whom are noted for their contributions to stonemasonry in the Santa Barbara-Montecito area in both public and private sectors. The most noted of the estates that gave Montecito its reputation for idyllic old world stonework were those of the Doultons, Knowles, Watermans, Eatons, and McCormicks, to name a few, which were all or part native sandstone that was quarried on site or in the nearby hills. The McCormick estate at Riven Rock, located north of East Valley Road (SR 192), is perhaps the most notable example of this trend. Constructed beginning in 1897 of stone acquired primarily from a local quarry operated by stonemason Philip Henley, the construction and maintenance of the estate's stonework required the talents of 40 stonemasons working over the course of 20 years.[68]

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[64] M. Macko, N. Rhodes, Archeological Site Record for CA-SBA-1959/H, "Rock Cutting," May 1985; W. A. Waldron, Archeological Site Record for CA-SBA-1959/H, "Location #14," March 1987.

[65] R. Peterson, Jr. and Linda Murray, Larry R. Wilcoxon Archaeological Consultants, Archaeological Site Record for CA-SBA-2313H, "MC-8," June 1987.

[66] Aubury, *Structural and Industrial Materials of California*, 116.

[67] "Supervisor Rucker Thwarts Passage of Road Ordinance," *The Morning Press*, July 18, 1909; Aubury, *Structural and Industrial Materials of California*, 133. The other three sandstone quarries mentioned were located many miles distant from the study area: one near Gaviota Pass, one at Santa Maria, and one at Refugio Canyon near the summit of the Santa Ynez Mountains.

[68] Marion Gregston, "Mysteries of the McCormick Mansion," *Montecito Journal* (June 2003): n.p.; Elane Griscom, "Stonemasons: Montecito's 'Old World' Artisans," *Montecito Magazine* (Fall 1987): 28-31, 61; Lin Rolens, "Romancing the Stones: The Styles and Traditions of Santa Barbara's Great Stone Walls," *Santa Barbara Magazine* (Spring 1995): 18-19; Patricia G. Cleek, "Some Early

These early Montecito stonemasons employed and trained their countrymen as well as locals, such as Santa Barbara native John Arroqui, who is another noted stonemason from this early period of building in Montecito who worked on bridges at several estates in the area. From 1910 through the 1940s, however, masons of Italian descent came to dominate the Montecito masonry scene. Italian and Italian-American stonecutters used chisels and points to carve rock by hand achieving a characteristic geometric angular masonry pattern, while masons laid stones with mortar in a more perpendicular pattern. During the 1910s and 1920s many of these immigrants who were initially employed as part of work crews became contractors and institutionalized the trade in Montecito. At one time there were over 100 Italian stonemasons engaged in their craft in the Santa Barbara-Montecito area. These Italian immigrants and their descendents – Inocente Buzzella, Albert Arrata, John Antolini, Antonio Da Ros, John and Stefano Goggia, and others – were responsible for much of the stonework at the original grand estates of Montecito during the first half of the twentieth century. Several estates along Alston, Ashley, Camino Viejo, East Valley, Riven Rock, and Sycamore Canyon roads are lined with the property walls, bridges, and other structures constructed by these masons during the early 1900s. During the post-war years, descendents of this first generation of Italian stonemasons were joined by a number of Mexican stonemasons, and continued to work in both traditional and more progressive masonry techniques.[69]

Given the abundant availability of high quality, workable stone, coupled with rich artisan heritage of stonemasonry in Santa Barbara and Montecito, it is not surprising that Santa Barbara County road builders selected sandstone as a primary building material on county roadways, especially in the foothills of the Santa Ynez range. County records and newspaper accounts from the early 1910s commonly mention the construction of county bridges using stone as a primary material. Many of these examples were designed by County Surveyor Frank Flournoy. Flournoy's successor, Owen O'Neill, also frequently used stone in his bridge designs both on and off of State Route 192. He designed, for example, a stone arch bridge on Ashley Road over Cold Springs Creek (1918), located less than a mile north of East Valley Road (Route 192).[70] Two large sandstone culverts over Oak Creek in Montecito – one on San Leandro Lane and one on Ramona Lane – are both constructed of dressed sandstone ashlar blocks and are similar in design to features found along Route 192. It has not been confirmed, however, that Flournoy or O'Neill designed these structures.

Discussion of Significance

Discussion of Potential Eligibility under Criterion A

An argument may be made that the features documented on this form may be potentially eligible for the National Register under Criterion A for their associations with the local Good Roads Movement and early permanent road building campaigns Santa Barbara County. Beginning in 1908, with the failed countywide bond act to fund road construction followed in close measure by the establishment of several permanent road divisions in Montecito, Carpinteria, Goleta, and elsewhere, the county embarked on a campaign to systematically improve its local roads. Between about 1909 and 1912, the various permanent road divisions, working in concert with the county board of supervisors and the county surveyor, issued bonds valued in the tens of thousands of dollars to fund construction of miles of paved roads within each division boundary. During this period, the Montecito, Carpinteria, and Mission Canyon road divisions implemented permanent construction of several miles of the county roads that became State Route 192 in 1933.

Stone Masons in Montecito," (typescript) Montecito Historical Commission, 1988; Maria Churchill, "The Diverse Ethnic History of Montecito," (August 12, 1993), publisher unknown, on file at the Montecito Historical Commission; Stella Haverland Rouse, "Joe Dover's Stone Walls Dot Local Landscape," *Santa Barbara News-Press* (July 20, 1980): n.p.

[69] Patricia G. Cleek, "Some Early Stone Masons in Montecito," n.p.; Elane Griscom, "Stonemasons: Montecito's 'Old World' Artisans," 28-31, 61; Lin Rolens, "Romancing the Stones," 19; Judith Ishkanian, "Every Stone Can Tell a Story of Italian Craftsmanship," *Santa Barbara News-Press* (May 27, 2004): n.p.; Obituary for John P. Arroqui, *Santa Barbara News-Press* (June 12, 1969): n.p; "Joseph Buzzella, Descendent of Immigrant Stonemasons," *Santa Barbara News-Press* (October 6, 1987): n.p; Cheryl Crabtree, "A Legacy Set in Stone," *Montecito Magazine* (Spring 2002): 31-36.

[70] Board of Supervisors Minutes, Book Q, June 10, 1918; Board of Supervisors Minutes, Book R, December 2, 1918.

The work progressed in increments as funding allowed. Each division decided which roads within its boundaries were of the highest priority and focused their construction efforts on those segments. The Coast Road, the primary transportation corridor through this part of the county that roughly followed the routing of the old El Camino Real, benefited most. East Valley Road, Sycamore Canyon Drive, and Foothill Road were the primary roads that formed a corridor collectively referred to as "the foothill road," the precursor to State Route 192. Unlike the Coast Road, a regional highway and primary thoroughfare that ultimately became State Route 2 (then U.S. 101), the state's principal north-south coastal route, the foothill road was a secondary route that served local traffic in the hills above Santa Barbara, Montecito, and Carpinteria. Improvement efforts to the foothill route during this early period were focused in the heart of upper Montecito, along Sycamore Canyon Drive and East Valley Road between and on either side of San Ysidro Road and Hot Springs Road. San Ysidro and Hot Springs roads, both being primary north-south connectors to the Coast Road, were also improved during this period, as were portions of Foothill Road and Casitas Pass Road above Carpinteria.

Following the end of World War I, the county embarked on a second phase of concerted road building along the foothill road and other rural routes that lasted through the 1920s. By this time the Coast Road had been completed and adopted into the state highway system. Again, construction along the foothill route was incremental and performed as funding allowed. Over a period of more than a decade, the county paved and improved most or all of the remaining length of State Route 192. Most of the work in Montecito having been completed in 1909 and 1911, the work focused on Stanwood Drive to the west and Toro Canyon and Foothill Roads to the east. Unlike during the permanent road division period of 1909 to 1912, funding for the improvements during the post-war era came from county road district budgets rather than bonds.

Local newspaper accounts from the early decades of the twentieth century are filled with descriptions of the road improvement efforts in the Santa Barbara area, especially during the 1909-1912 period. However, the articles almost always focus on the passage of bond measures or the particulars of the road construction efforts such as highway mileage within a given district and the type and method of paving employed. There appears to be no evidence in these accounts that the foothill route was developed as a scenic highway, or even that aesthetic design was a factor in selecting certain materials, specifically local stone, in its construction. Although it passes through Montecito's beautiful countryside and has been widely regarded as a charming scenic route, this characteristic is almost treated by contemporary observers as a coincidental byproduct of its primary function, to facilitate reliable and efficient local travel between the foothill communities. This fact is punctuated by Santa Barbara County's decision in 1909 – the same time that the Montecito Permanent Road Division began its first permanent improvement work along Sycamore Canyon and East Valley roads – to set aside Mountain Drive, which roughly parallels State Route to the north, as a dedicated scenic drive. In the eyes of the county supervisors, this road, with its isolated, bucolic setting and stunning vistas, best captured the scenic and aesthetic qualities of Santa Barbara's countryside.

In contrast to the Mountain Drive scenic route, State Route 192 and the confederation of county roads from which it was formed have always served a utilitarian function as the primary east-west transportation corridor through the foothills above the Santa Barbara coastline. The county acquired the highway's right-of-way, as it exists today, on an as-needed, incremental basis over a period of nearly sixty years. The permanent construction of the highway also progressed incrementally as funds became available, spanning the period from 1909 through 1931. The county road builders during this time approached the various construction projects along the highway in a practical and pragmatic manner, with the expressed goal of building a durable and functional thoroughfare at a minimum cost. Entry after entry in the minutes of the Board of Supervisors tells of contracts let for highway or bridge construction in which the winning party was selected for the sole reason that they submitted the low bid. At least half a dozen different contracting firms, most of them locally-based, constructed bridges or permanent portions of the highway over the twenty-one year period; the county itself, using local hired hands, participated in the construction of three other sections of the highway and completed an unfinished bridge. These contractors and day laborers used locally procured stone, gravel, asphalt, and other materials to build the highway facilities. Reflecting countywide road building practices that emphasized durability and longevity, most appurtenant engineering features such as culverts, bridges, and retaining walls, were built of concrete or stone. Which of these materials was used on a given stretch of highway was generally a function of cost and local availability. In the

Montecito area, which is rich in surface sandstone deposits, stone engineering features were the norm, although these were interspersed with numerous concrete structures, particularly culverts and retaining walls.[71] Concrete was the main building material on the west and east ends of the highway where stone deposits were in shorter supply. Again, there were exceptions to the rule: the culvert at post mile 2.8 was constructed using sandstone blocks, as were the abutments and railings of the Carpinteria Creek bridge (since replaced), located at about post mile 19.0.

The only possibility for State Route 192 and its appurtenant stone masonry engineering features to be eligible under Criterion A is when the resource is considered as a potential historic district. Individually, no single resource embodies the strength of association to the county's Good Roads movement or early road building campaigns to convey any historic significance that may derive from that period. The road system as a whole would best represent the themes discussed above.

State Route 192 and its stone masonry resources does not appear to meet the Criterion A requirements as an historic district because it lacks both significance and integrity to its potential period of significance, 1909 to 1929. When considered in a statewide or national context, there is nothing extraordinary about the development of the foothill route as an outgrowth of the Good Roads movement. The Good Roads movement of the late 1800s and early decades of the 1900s was rooted in the desire for better transportation systems to help facilitate travel between communities. It was generally rural and regional in scope, and was championed variously by bicyclists, farmers, commercial concerns, and automobile enthusiasts. Dozens of advocacy groups representing these various concerns emerged during the 1890s. California held its first Good Roads convention in Sacramento in 1893, followed by a national convention in St. Louis in 1903. The advent and rapid increase in popularity of the automobile during the first decade of the twentieth century added additional urgency to the issue of road improvements, but by this time the Good Roads movement had already been well established. Within this context, the development of State Route 192 as a permanent route, which occurred sporadically over a two decade period beginning in 1909, is a relatively late example of a good roads project.

Similarly, when considered in a local context, State Route 192 does not best represent the aims and achievements of the movement. The Coast Road, which followed the Santa Barbara coastline parallel to and south of State Route 192, was inarguably the focal point of early road construction throughout the county. The citizens and public figures of Santa Barbara County viewed the prompt completion of this primary route as essential for county's economic prosperity and to secure its place as an important tourist destination. It received the lion's share of the funding from the bonds issued by the county's various permanent road divisions between 1909 and 1912, as well as widespread coverage in the local press during the same period. The Coast Road was completed by 1916, in time for its inclusion in the state highway system. In contrast, the foothill route (SR 192) was a secondary highway that served local traffic. Although undeniably an important corridor for the rural citizens of Montecito and Santa Barbara's other foothill suburban communities, it was not the principal focus of the county's good roads advocates, a fact which is evidenced by its two decade long construction history.

Ultimately however, the most important single factor against an historic district for State Route 192 and its facilities is that too few resources are potential contributors to such a district, and that those that would contribute are spread too thin over the length of the highway. An historic district, according to National Register guidelines, "...is a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or

[71] A series of plan and profile maps produced by the Montecito County Water District between 1924 and 1926 depicts portions of Sycamore Canyon Road, East Valley Road, and Toro Canyon Road and provides some information about the construction characteristics of the State Route 192 at that time. Because the plans were developed for the purpose of installing water lines along the roadways, not for purposes of building the roadway itself, the road engineering features depicted on the map almost certainly do not reflect the entire universe of structures that actually existed at that time. Nonetheless they show that even in Montecito, where stone masonry was the favored material, it was not the exclusive material used in the construction of appurtenant highway features. See: Montecito County Water District, "Plan and Profile of Valley Road," January 5 and February 14, 1924; "Plan and Profile of East Valley Road," 1926; "Plan and Profile of Toro Canyon Road," 1926.

physical development."[72] Although the highway and its engineering structures are united historically, they do not represent a significant concentration of resources that convey any potential historic significance. First, the roadbed itself does not appear as it did during the potential period of significance. During the 1910s and 1920s the highway was constructed to widths varying between twelve and 20 feet (sixteen feet being the most common width) and most segments surfaced with oiled macadam or crushed rock in asphalt. The modern highway has a fairly uniform width of twenty-two feet, and has recently been resurfaced along its entire twenty-one mile length with asphalt.

In terms of its engineering features, of the 47 resources identified under this study, only 18, or less than 40 percent, include above-grade components that are visible from the roadway. These above grade components consist primarily of guardrails on bridges or culverts or retaining walls that extend above the level of the roadway to form a parapet. These features embody the physical characteristics of the stonework that was built along the original permanent highway and present a visual representation of the engineering and design principles that the county surveyors chose to employ along this stretch of highway during the period. The remaining twenty-nine features are sub-grade structures, primarily small culvert headwalls, that have served a strictly utilitarian purpose and do not contribute to the aesthetic qualities of the highway. The 18 above-grade features are distributed over a nearly thirteen-mile stretch of highway, with the westernmost feature located at post mile 2.80, and the easternmost at post mile 15.52. This equates to slightly more than one contributing resource per average mile of highway, with several of the features separated by distances of more than a mile, particularly along the westernmost and easternmost stretches of the highway.

Additionally, several of these resources have diminished or compromised integrity. Feature JRP-1 (P.M. 5.33) and Feature S (P.M. 7.39) have lost substantial integrity due to modifications following road widening. Several other features were impacted to a more moderate degree, also likely as a result of road widenings. One of the two original parapet guardrails for Features Z (P.M. 5.62) and JRP-17 (P.M. 10.54), for example, have either been removed or unsympathetically patched or reconstructed. The potential district has been further diluted by the fact that at least two important and highly visible original stone features, the Santa Monica Creek and Carpinteria Creek bridges, have been replaced with modern, entirely concrete structures. Finally, the visual impact of the highway-related stone masonry features is markedly diminished by the presence of countless linear feet of private stone masonry walls that parallel the highway on adjacent properties. While the historic period, highway-related sandstone and cobblestone features along State Route 192 are interesting artifacts of early period of permanent road construction, they do not exist in high enough amount or concentration to adequately convey any significance under that theme.

Discussion of Potential Eligibility under Criterion B

Construction of the early permanent roads that comprise modern State Route 192, as well as its associated stone masonry engineering features, were by and large designed by county surveyors Frank Flournoy (from 1909 through 1915) and Owen O'Neill (1916 through 1929). Both enjoyed long careers in the public sector and were responsible for the designs of dozens of bridges throughout the county and were instrumental in planning and implementing other public works programs throughout the county during the first half of the twentieth century. Although they were undeniably important figures in the county's history, State Route 192 and its appurtenant structures do not best represent their productive lives, as National Register guidelines require for Criterion B eligibility. Properties that might better represent their productive lives might include the office building or home in which they lived during that period.[73] The bridges and stone masonry structures along State Route 192 of Flournoy's and O'Neill's design are engineering features. These are best considered under Criterion C for their architectural or design merits, rather than their associations to individual persons.

[72] USDI, NPS, "How to Apply the National Register Criteria for Evaluation," *National Register Bulletin 15* (Washington, D.C.: 1991), 5.

[73] U.S. Department of the Interior, National Park Service, *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation* (1991), 14-15. See also: Beth Grosvenor Boland, *National Register Bulletin: Guidelines for Evaluating and Nominating Properties Associated with Significant Persons* (U.S. Department of the Interior, National Park Service, n.d.). Accessed online at www.cr.nps.gov/nr/publications/bulletins, November 29, 2005.

Discussion of Potential Eligibility under Criterion C

Two of the resources recorded as part of this project have been previously surveyed and determined eligible for the National Register under Criterion C: Sycamore Canyon Creek Bridge (Bridge #51-106; JRP-6) and Romero Canyon Creek Bridge (Bridge #51-110; Feature M). These features were revisited as part of the current study and appear as described in previous documentation; they continue to retain the historic integrity necessary to convey their significance as important examples of bridge design.

None of the remaining 45 stone masonry features recorded along State Route 192 appear to meet the Criterion C requirements for individual listing in the National Register. These features do not appear to be important examples of a type, period, or method of construction, nor are they significant examples of highway engineering structures designed by a master. The character-defining features of the highway structures evaluated for this study are their method of construction (stone masonry) and their materials (local dressed sandstone or cobblestone). The structures are generally pointed with thick ribbons of mortar, though a few incorporate far less mortar such that it is only visible on close inspection. In most cases, the stones are uniformly cut into rectangular blocks with beveled edges, then laid in uniform courses of parallel rows, with the rows offset from one another to add strength. This relatively simple method of stone masonry is called "ashlar coursing," and is also referred to as the "English style."[74] Some structures, such as the Sycamore Canyon Creek Bridge (JRP-6) and the guardrails of the Toro Creek and Toro Canyon Creek bridges (Features JRP-22 and JRP-24), are constructed of randomly coursed (or uncoursed) cobblestones.

The stone masonry retaining walls, parapet walls, and culverts located along State Route 192 are utilitarian features that reflect widely accepted engineering practices of the time of their construction. As early as 1894, stone box, stone arch, and metal pipe culverts capped with a stone headwalls were in wide use on roadways and their basic design principles had already been perfected. Stone was the principle material for constructing these engineering features during the late 1800s, and remained so into the early 1900s, so the mere existence of such features along a highway is insufficient to convey historic significance; they must be significant examples of their type. By 1913, reinforced concrete retaining walls and culverts had become increasingly common, as had metal or timber guardrails, but none of these advancements had entirely supplanted their stone masonry counterparts. In fact, in rural areas of California at least, stone masonry highway engineering features were widely constructed well into the 1930s.[75] As ubiquitous and utilitarian resources that followed standard design principles of the time, these features do not appear to meet the criteria for individual listing in the National Register under Criterion C.

There are four bridges along State Route 192 that feature stonework in their construction, in addition to the two aforementioned National Register eligible bridges. These bridges, designed by County Surveyor Owen O'Neill and constructed by contract between 1922 and 1929, are similar in design and appearance. The hallmark characteristics of this bridge type include a concrete tee-beam road deck, mortared sandstone ashlar abutments with flared wingwalls, and guardrails constructed of either sandstone ashlar blocks or cobblestone. These bridges, Mission Creek (#51-105; JRP 27), Toro Creek (#51-111; JRP 22), Toro Canyon Creek (#51-112; JRP 24), and Arroyo Parida (#51-113; JRP 36), were previously inventoried and evaluated under the Caltrans Bridge Survey of the 1980s and found to be Category 5 (i.e., not eligible for listing in the National Register). The bridges all have reinforced concrete tee beam decks, a common bridge deck design throughout the state and in Santa Barbara County during the 1910s and 1920, with the earliest extant examples in the county dating to 1914. In terms of their deck design, these bridges are typical examples of a common type that warrant the Category 5 classification. Neither does the use of stone in their design warrant their inclusion in the National Register under Criterion C. Up until the 1880s, bridge abutments (and piers) were built almost exclusively of

[74] Lin Rolens, "Romancing the Stones, The Styles and Traditions of Santa Barbara's Great Stone Walls," *Santa Barbara Magazine* (Spring 1995): 18-19; "Design in Stone Walls," *The Santa Barbara Gardener* (December 1928): 6.

[75] Arthur H. Blanchard and Henry B. Drowne, *Text Book on Highway Engineering* (New York: John Wiley & Sons, Inc., 1913), 697-717; JRP Historical Consulting and Robert Pavlik, Historical Resources Evaluation Report, Big Sur Culvert Replacement Project, Highway 1, Monterey and San Luis Obispo Counties, California," October 2004.

stone masonry, usually consisting of ashlar granite, limestone, or sandstone blocks. By about 1910 reinforced concrete had replaced stone as the favored material for bridge abutments, but stone abutments were still commonly used in areas where quarries were in close proximity.[76] Because the four bridges described above do not embody significant qualities of engineering or design, they do not appear to meet the Criterion C requirements for individual listing in the National Register.

In terms of a potential historic district under Criterion C, the collection of stone masonry resources fails to meet National Register requirements because they lack significance. Although the individual elements are not distinct for their engineering or design, it may still be possible to construct an argument for a historic district under Criterion C based on the collective design merits of the resources. This has been successfully argued for only a few state highways that include collections of stone masonry features, such as the Carmel to San Simeon Highway (Highway 1) in San Luis Obispo and Monterey counties, and State Route 89 at Emerald Bay in El Dorado County.[77] National Register historic districts consisting of an array of stone masonry water fountains, bridges, parapet walls, and culverts have been determined or recommended eligible along these highways, despite the fact that most of the features included reflected standardized designs and commonly accepted engineering principles. The arguments for eligibility of these districts hinged on the conclusion that they represent some of the highest quality and most concentrated collections of masonry resources known throughout the state.

The State Route 192 masonry resources do not live up to this high standard. Stone masonry construction is widely popular throughout Santa Barbara and Montecito, and has been since the Spanish period and the establishment and construction of Mission Santa Barbara. This is due in large part to the abundant supply of high quality sandstone that exists in large, near-surface deposits throughout the Santa Ynez foothills, particularly in the vicinity of Montecito. Additionally, beginning in the late nineteenth century Santa Barbara and its surrounding communities have attracted, and continue to attract, skilled stonemasons hailing primarily from Italy, Spain, and Mexico, but also from Northern European countries such as Scotland and Germany. These talented craftsmen, using fine quality materials, have designed and constructed countless stone buildings, bridges, property walls, and a wide variety of other structures particularly within the city of Santa Barbara and the hills of Montecito that rise to the level of possessing high artistic merit. Literally miles of State Route 192 are lined with estates containing private property walls built by local stonemasons that reflect a variety of construction dates and techniques. It is these private features, far more than the relatively minor and widely distributed stone masonry highway walls and structures, that best define the scenic qualities of the highway corridor.

As outlined under the Criterion A discussion above, the stone masonry resources on State Route 192 are widely distributed and do not represent a significant concentration of potentially contributing resources. Furthermore, this type of feature was not peculiar to State Route 192. Board of Supervisors minutes and newspaper articles from the 1910s and 1920s are filled with accounts of construction projects that featured stone masonry elements, particularly in the Montecito vicinity where sandstone was in abundant supply. Mostly these features were bridges, many of which were located along the Coast Road; several others were built on Montecito's many side roads. Cost and permanency were explicitly stated to be the overriding factors in the decision to use stone as a building material. For these reasons, it does not appear that the historic period, highway related stone masonry engineering features along State Route 192 are significant for their engineering or design merits, and therefore do not meet the Criterion C requirements for listing in the National Register.

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[76] Ira Osborn Baker, *A Treatise on Masonry Construction* (New York: John Wiley & Sons, 1909), 539; Henry S. Jacoby and Roland P. Davis, *Foundations of Bridges and Buildings* (New York: McGraw-Hill Book Company, Inc., 1925), 428-431, 477-478.

[77] JRP Historical Consulting and Robert Pavlik, "Historical Resources Evaluation Report, Big Sur Culvert Replacement Project, Highway 1, Monterey and San Luis Obispo Counties, California," October 2004;
Stephen D. Mikesell, "Historical Architectural Survey Report: Masonry Features at Emerald Bay, 3-ED-89 P.M. 16.6/18.0," September 1986.

Discussion of Potential Eligibility under Criterion D

In rare instances, buildings and structures can serve as sources of important information about historic construction materials or technologies (Criterion D). As detailed above under the section on Criterion C, the stone masonry, highway-related features along State Route 192 are common examples of their type, are relatively simple in their method of construction, and have been thoroughly documented in contemporary newspaper accounts, public records, historic photographs, and contemporary literature regarding the commonly accepted principles of stone masonry as well as bridge, retaining wall, and culvert design. The stone masonry features evaluated as part of this study do not, therefore, appear eligible under Criterion D, whether considered individually or as a group.

***Recorded by:** Susan Zamudio-Gurrola ***Date:** June 4, 2019 ☐ Continuation ☒ Update

The subject property consists of a 52.3-acre ranch which includes the main residence, barn, garage, foreman's residence, guest house, art studio, various ancillary buildings and sheds, and avocado and lemon orchards. Rincon Road cuts through the northwest end of the ranch, making the property a discontiguous parcel (APN 008-0-160-460). While the majority of the property is located southeast of the road, a narrow sliver is located northwest of the road (Ventura County GIS).

The property, known as Abbott Ranch, was previously evaluated by Gloria Scott for Caltrans in 1990, the findings of which were detailed in the Historical Architectural Survey Report and Historic Property Survey Report prepared for the Rincon Creek Bridge Replacement and Realignment Project (Scott 1990a and 1990b; Caltrans District 5 Environmental Planning Branch 1990).

At the time of Scott's evaluation, the ranch included the main single-family residence constructed circa 1876, barn (pre-1927), foreman's cottage (1935), garage (no date), carport (no date), playhouse (c. 1935), art studio (c. 1990) and a couple of small frame sheds. Large trees, hedges and gardens surrounded the house; the ranch was planted with avocado and lemon orchards. Scott documented numerous alterations to the c. 1876 residence which originally was constructed as a two-story, cross-gabled, vernacular farmhouse with a cruciform plan. The home was essentially doubled in size through additions on the south side of the house and wrapping around the north and east sides of the house. These alterations were detailed elevation by elevation and included: extending the south wall of the home out two separate times; addition of French doors; chimneys were partially removed and capped; mismatched exterior siding including V-rustic, board-and-batten, channel, 3-lap round-edge drop and plain redwood siding; shed-roof dormers added to the northeast and southeast corners of the house and hipped-roof dormers added to the northwest and southwest corners of the house in the early 20th century; a stucco chimney jutting through the roof dormer at the northwest corner was built in the 1920s; a cobblestone wrap-around porch was built in the early 20th century; removal of a portion of the aforementioned porch's roof; partial enclosure of the porch with multi-light glass panels in the 1940s; new replacement redwood decking and stairs on the west elevation were installed in the mid-1980s; re-siding; installation of new windows in the 1920s; construction of a flat-roofed one-story addition at the southeast corner of the home in 1935; construction of a one-room "shop" addition at the northeast end of the home about 1940; construction of a one-story shed-roof addition which bridges the space between the "shop" addition and the original portion of the home circa 1920s; extension of the kitchen to the north and east, construction of a boxed chimney and a redwood deck in 1983-1984. Also documented was the demolition of a tank house around 1940 (Scott 1990a).

Although Scott was not able to definitely identify a construction date for the garage east of the residence and carport northeast of the residence, she suspected they had been constructed after 1950. Aerial photographs show the garage was constructed between 1973 and 1978, and the carport after 1978 (UCSB Map & Imagery Lab 1973, 1978).

What is today known as Abbott Ranch was carved out of Rancho El Rincon, an 1830s land grant, when the rancho began being subdivided in the 1870s by Dr. Matthew H. Biggs. Milton Sprague Dimmick bought property making up the greater part of Abbott Ranch in 1876. Based on county assessor's records, it is believed the farmhouse was built under Milton's tenureship. Milton died in 1890 in Los Angeles County and left his property to his widow, Ella, and daughters Carrie and Mabel Martha. After Ella remarried to Reverend Jerome F. Tubbs the property was known as Tubbs Ranch. After Ella's death Carrie and Mabel Martha continued to live at the ranch until approximately 1918, and retained ownership of the ranch with Reverend Tubbs until 1923. Reverend Tubbs also acquired approximately 10 adjacent additional acres which were conveyed to Carrie and Mabel Martha. The ranch was sold in 1923 to Tirey C. Abbott who had arrived in the Carpinteria area the year prior. At the time the ranch was planted mostly with walnut trees and a smaller amount of beans. Abbott gradually began to change crops, planting his first avocado trees in the mid- to late- 1920s. He also introduced lemons to the ranch. In 1927 Santa Barbara County realigned the county road which required the barn to be moved (to its present location) and the entry drive to the house to be re-oriented. In addition, a house which formerly stood in the vicinity of the barn's original location by the creek was removed sometime before 1927. Tirey married in 1929; subsequently various improvements were made to the house including: enlarging the house and construction of new buildings between 1929 and the 1940s as described above (Scott 1990a).

Tirey Abbott and his family remained on the ranch through the mid-twentieth century, after which the house was rented to other tenants. The ranch continued under agricultural production. In the 1980s, Tirey's son Duncan acquired the property, moved into the house with his wife, Meredith, and took on operation of the ranch. Additional remodeling occurred in the 1980s after they moved onto the property (Scott 1990a). Meredith, also known as Ky, enjoys a reputation as a plein air painter (Sullivan Goss, n.d.).

At the time of the previous evaluation, Scott concluded the Abbott Ranch had dramatically changed in appearance due to alterations and additions made during the period from 1929 through the 1950s; therefore, its appearance no longer resembled a nineteenth century rural property. Additionally, archival research did not uncover evidence that Milton S. Dimmick or Reverend Tubbs made significant, demonstrably important contributions to Carpinteria, Santa Barbara County or Ventura County history. Lastly, the property's association with Tirey Abbott encompassed a period less than 50 years ago (from the date of Scott's evaluation in 1990). Archival research indicated Tirey Abbott was a typical grower, not an innovator, and the property did not have exceptional significance or associations. The Abbott Ranch was recommended ineligible for inclusion in the NRHP, a finding which received concurrence from the State Historic Preservation Officer on August 9, 1990 (Gualtieri 1990). See sheet 2.

Scott noted that the property owner had submitted an application in 1989 to the Ventura County Cultural Heritage Board (CHB) to consider the property for local historic designation, and the CHB believed the property met its criteria for local designation. However, the property owner subsequently withdrew the application (Scott 1990a and 1990b). This account was not able to be verified after communication with Ventura County Planning staff conducted as a part of this study.

The current survey update of the Abbott Ranch was conducted on June 5, 2019 as part of the Cultural Resources Assessment report for the Ventura-Santa Barbara Counties Intertie Project, prepared by Rincon Consultants, Inc. for Casitas Municipal Water District. Based on examination of the subject property, additional changes have occurred to the ranch since the time of its last evaluation. Solar panels were added to the garage's roof; a small portion of the ranch near the junction of the entry drive with Rincon Road was lost due to a realignment of the road completed in 2005; one of the oak trees flanking the entry drive at Rincon Road was also lost due to the road realignment (a replacement tree was planted and is now mature); it appears new ancillary structures were added west and east of the foreman's residence and east of the barn (Bell 1990; Google Earth, various; Abbott 2019). Also of note, the inventory/evaluation forms completed in 1990 did not include a secondary residence located approximately 220 feet east of the main residence. Aerial photographs indicate it was built by 1994, likely after Scott's evaluation of the property (NETR online, various). A two-story building, it has a hipped roof with a cross gable, horizontal wood siding, an exterior staircase, and two exterior decks on the façade each lined with wooden railings. Fenestration is composed of vinyl-sash double-hung and casement windows, and a contemporary wooden entry door with a single pane above two panels.

The property continues to be owned by the Abbotts, with Robert's son Duncan Abbott joining in the ranch's operation. In addition, the Abbotts now also perform ranch management duties for other property owners (Abbott 2019).

Based on the current survey update, property remains ineligible for listing in the NRHP or CRHR as it has been substantially altered as originally noted in 1990 and detailed above, and no longer retains the necessary integrity for either designation. In addition, the property has undergone additional alterations since the previous evaluation, which have further diminished its integrity. The property does not appear to meet the criteria for local designation as a Ventura County Landmark as one of the criteria (criteria 6, Integrity) states that the authenticity of the resource's physical identity should be established by evidence of lack of deterioration and significant survival of the characteristics that existed during its period of importance; and shall be evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling and association. Despite its lack of integrity and ineligibility for listing in the NRHP, CRHR, or local landmark designation, the property does qualify for listing as a Ventura County Site of Merit. As a farmhouse and avocado and citrus ranch that has remained in ownership and operation by the same family for nearly 100 years, the Abbott Ranch appears to satisfy the criteria for designation as a Ventura County Site of Merit defined as "sites of historical, architectural, community or aesthetic merit which have not been designated as landmarks or points of interest, but which are deserving of special recognition". Eligibility for a Ventura County Site of Merit does not require a resource to meet an integrity criterion. As such, the property is considered a historical resource for the purposes of CEQA.

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***Recorded by:** Susan Zamudio-Gurrola ***Date:** June 4, 2019 ☐ Continuation ☒ Update

Main residence, north and west elevations, view SE

Main residence, north elevation, view SW

Ancillary building/playhouse SE of main residence, view N

Studio SE of main residence, south elevation, view NE

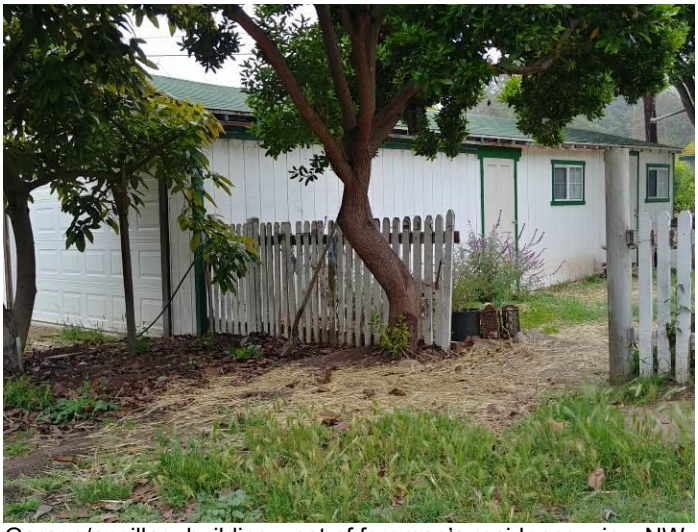
Garage E of main residence, east & north elevations, view SW

Carport NE of main residence, view NW

Guest house, south and west elevations, view NE

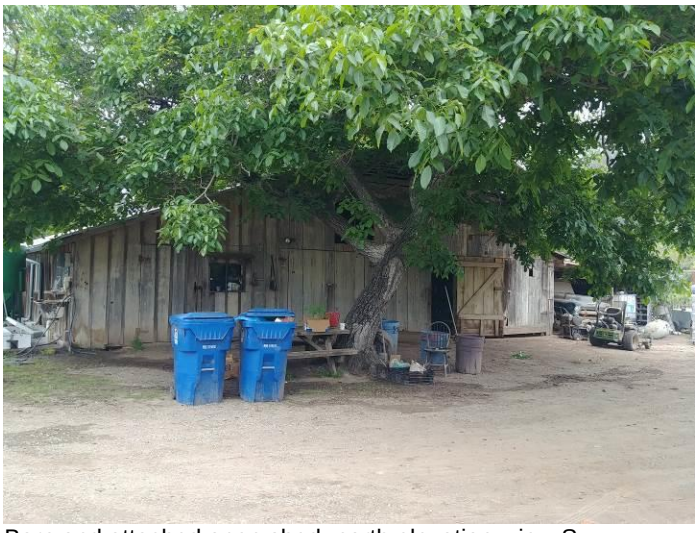
Foreman's residence, south and west elevations, view NE

Ancillary building east of the barn, north elevation, view SE



Garage/ancillary building west of foreman's residence, view NW

Ancillary building east of foreman's residence, view NW



Barn and attached open shed, north elevation, view S

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary # P-56-152756
HRI#
Trinomial

***Resource Name or #:** Abbott Ranch, 9126 Rincon Road

***Map Name:** USGS *White Ledge Peak* Quadrangle

***Scale:** 1:24,000 ***Date of Map:** 1952 (photorev. 1988)

***Required information**

56-152756

CALIFORNIA DEPARTMENT OF TRANSPORTATION
ARCHITECTURAL INVENTORY/EVALUATION FORM

MAP REFERENCE NO. 1

County - Route - Postmile: 05-SB150, 1.1/1.9

( ) LISTED ( ) DETERMINED ELIGIBLE
( ) APPEARS ELIGIBLE (X) APPEARS INELIGIBLE

IDENTIFICATION

1.Common Name: Abbott Ranch

2.Historic Name: M.S. Dimmick Ranch/Glenrose

3.Street or rural address: 9126 Rincon Rd. S/White Ledge Peak

City: Carpinteria **Zip Code:** 93013 **County:** Ventura

4.Parcel Number: #008-0-160-140 **Present Owner:** Duncan and Meredith Abbott

Address: P.O. Box CC **City:** Carpinteria, CA **Zip Code:** 93013

5.Ownership is: ( ) Public (X) Private

6.Present Use: Residence/avocado & lemon ranch **Original Use:** Residence/walnut ranch

DESCRIPTION

7a.Architectural Style: Vernacular

7b.Physical Condition: (The present condition of the site or structure and any major alterations from its original condition.)

Original portion of house: The original portion of the house, constructed circa 1876, is a two-story, frame, cross-gable vernacular farm house. According to the current owner, this portion rests on redwood planks that are bound together to form sills, and early brickwork still exists under a couple of the original chimneys (now partially removed and capped). A portion of the east wall (now within a shop addition) has V-rustic siding, while 3-lap round-edge drop siding covers portions of the south wall. Most of the original portion of the house, however, is sheathed in plain redwood siding with plain gable fascia boards and small half-round end boards. There are single 2/2 double-hung windows with capped lintels on the second story and paired 2/2 double-hung windows, with lamb's tongues, in plain surrounds on the first story. Like the redwood siding, the paired 2/2 windows appear to be from an early-twentieth-century remodeling; the windows have closed stiles and rails. Shed-roof dormers with exposed rafters, shingle siding and wooden sliding windows in plain surrounds were added sometime in the early twentieth century to the northeast and southeast corners of the house. Likewise, hipped-roof dormers with boxed eaves, shingle siding and similar windows were added at approximately the same time to the northwest and southwest corners of the house. A single-shoulder stucco chimney that juts through the roof dormer in the northwest corner was constructed in the late 1920s by the current owner's father.

(See continuation sheet.)

8. **Construction date:** 1876, 1910, 1929
   Estimated: (X) **Factual:** ( )
9. **Architect:** Unknown
10. **Builder:** Unknown
11. **Approx. property size**
    Acreage: 55 acres
12. **Date(s) of enclosed photograph(s):**
    November 1989

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7b.Physical Condition: (Continued.)

Porch on original portion: The early-twentieth-century cobblestone wrap-around porch is typical of the Craftsman era. Formerly roofed on all three sides, only the north section remains covered by a shed roof. There is a tongue-and-groove ceiling and some V-rustic siding evident in this section, which was enclosed with multi-light glass panels in the 1940s. New replacement redwood decking on the uncovered part of the porch and redwood stairs on the west elevation were installed in the mid-1980s.

Interior: Mid-nineteenth century interior features include only the enclosed single-flight, narrow staircase in the center of the house and a c.1870s 4-panel door in the east attic bedroom. Tongue-and-groove boarding from the turn of the century can be seen in some of the exterior soffits, several interior ceilings and in various closets in the house. The interior predominantly reflects early-twentieth-century changes, including single-panel doors with clear glass knobs, tongue-and-groove lined pantry addition, clawfoot tub and pedestal sink in one of the bathrooms, and built-in shelves by fireplace mantel, which is simply paneled with slender round molding.

West elevation: Changes include residing, removal of the porch ceiling, and the installation of new decking. The second set of paired 2/2 windows were installed in what was originally the southwest corner of house. This most likely occurred when this corner (the living room) was extended southward about five feet sometime in the 1920s. (According to the owner, the extension had already been made by the time his father acquired the property in 1923; based on existing architectural evidence, this seems unlikely.)

South elevation: In addition to the 1910s roof dormers previously described, major changes include: the extension of about two-thirds of the length of the south wall, once (according to the current owner) prior to 1929 when the living room area was extended southward about five feet and French doors installed in living room, bedroom; and again in 1929, when the living room wall was extended another few feet; the bedroom and dressing room area were likewise extended at that time to match the living room extension. The extended portion is sheathed in plain redwood siding and has French doors and 2/2 windows. The easternmost side of the elevation retains round- edge drop siding.

East (rear) elevation: In 1935 a flat-roof, single story addition was built onto the southeast corner of the house. Called a sleeping porch by the current owner (whose father built the addition), the addition has single wall construction, board- and-batten siding, 1/1 windows, sliding windows and a five-panel door. Sometime around 1940, according to the owner, the northeast "shop" addition was built using materials salvaged from the water tower that stood on the site. The shallow-pitch, gable-roof, one-room structure has channel siding with wide end boards, small 1/1 windows, a five-panel entry door and double 2"x3" stud framing.

North elevation: Bridging the space between the "shop" addition and the original portion of the house is a one-story, frame, shed-roof addition. It appears to have been built in the 1920s as one long addition, two-thirds the length of the original house. At the east end it connects to the "shop" addition and at the west end it terminates in the center of the gable-end wall. This addition has plain redwood siding, tongue-and-groove soffits, and single and paired 1/1 windows (with lamb's tongues) in plain surrounds. As built, it contained approximately four rooms including, a pantry, small kitchen, and a bathroom. Abutting this addition is a set of paired 2/2 dining room windows that are off center beneath the single 2/2 window above, making the façade asymmetrical and suggesting that the addition may have been built at the same time other interior and exterior renovations were made in the late 1920s. In 1983-84, the current owners once again extended the kitchen north and east, duplicated the novelty siding, as well as plain fascia boards found on the "shop" addition (the re-used water tower siding), added a large multi-light picture window, and built a boxed chimney for the cobblestone corner fireplace. Concurrently, the present owners also built a large redwood deck encircled by a low wall composed of replicated "novelty" siding. A tall picket fence encloses the small side yard on the north side of the kitchen addition.

(See continuation sheet.)

CALIFORNIA DEPARTMENT OF TRANSPORTATION
ARCHITECTURAL INVENTORY/EVALUATION FORM MAP REFERENCE NO. 1
Project: 05-SB150, 1.1/1.9 (Abbott Ranch)

7b.Physical Condition: (Continued.)

Outbuildings: There is a frame shed-roof carport northeast of the house, and a frame, gable-roof, four-car garage east of the house, both of which appear to have been built in the last 40 years. A c.1935 board-and-batten gable-roof playhouse is situated southwest of the house as are a couple of small frame sheds and a new shed-roof, solar-panel, frame studio.

Barn: A vertical-board, four-bay, gable-roof barn is located northwest of the main house. The barn now rests upon concrete footers; the walls appear to have been built with salvaged boards that exhibit band saw and circular saw marks. The open-plan barn has a side aisle on east; the open shed vehicle storage area on west appears to be about 15 years old. Circa 1927 (when the county road was re-aligned), the barn was moved to this location from its former site down by the creek.

Foreman's cottage: This single-story, gable-roof, frame house was built in 1935, faces south and is northeast of the main house. It has exposed rafters, 1/1 windows in plain surrounds, 3-lap drop siding, a center door in the gable end with gable-roof wood porch with plain posts, wooden steps. A wood vertical-slat skirt circles the base of the house. There is a small addition on the rear elevation and a c.1950s shed-roof frame addition with aluminum sliding windows on the east elevation. A small open shed is located to the rear of the house.

Landscaping: The house is well hidden behind abundant, mature landscaping, including large trees and hedges on the north, west and south, gardens on the north and south sides, with avocado and lemon orchards forming a larger ring beyond. The house is reached by a long drive that is marked by two mature oaks at Rincon Road (Route 150); after a fork in the road which leads to the barn and foreman's cottage, the primary road winds up to the house.

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13.Condition: Excellent (X) Good ( ) Fair ( ) Deteriorated ( )

14.Alterations: As noted in 7b.

15.Surroundings: (Check more than one if necessary) Open land (X) Scattered buildings (X) Densely built-up ( ) Residential ( ) Industrial ( ) Commercial ( ) Other: Agricultural, citrus and avocado groves in small creek valley, mature oaks, vegetation along Rincon Creek.

16.Threats to site: None known ( ) Private Development ( ) Zoning ( ) Vandalism ( ) Public Works Project (X)

17.Is the structure: On its original site? (X) Moved? ( ) Unknown? ( )

18.Related features: As noted in 7b.

SIGNIFICANCE

19.Historical and/or Architectural Importance: (Dates, events, and persons associated with the site.)

Early names of the Abbott Ranch depict not only the evolution of the ranch itself, but mirror the development of the Carpinteria area in general. Previously known as Rancho El Rincon, Glenrose, Dimmick Walnut Orchard, and the Tubbs Ranch, these names reflected the changes that occurred on the ranch. The ranch is located in Rincon Valley in the heart of the old Rancho El Rincon and is basically all the flat land in the little valley along Rincon Creek. Between the 1830s-1840s when Teodoro Arellanes was first granted this rancho of 2 square Spanish leagues and 1872 when Arellanes' son-in-law, Dr. Mat(t)hew H. Biggs, assisted Arellanes in obtaining a patent in 1872, the undeveloped land was occasionally leased for sheep and cattle grazing. Ultimately, Dr. Biggs acquired the rancho through his marriage to Maria de Jesus Arellanes de Biggs. Between 1870 and at least 1887, Dr. Biggs was primarily an absentee landowner, living for the most part in Chile, the land of his birth. Acting through his attorney, C.B. Bates, Dr. Biggs began subdividing the rancho in the 1870s. (See continuation sheet.)

Location sketch map: (Draw & label site and surrounding streets, roads, and prominent landmarks.) See Map Reference No. 1

20.Main theme of the historic resource: (If more than one is checked, number in order of importance.)

Architecture ( ) Arts & Leisure ( )
Economic/Industrial ( ) Exploration/Settlement (X)
Government ( ) Military ( ) Religion ( )
Social/Education ( ) Agriculture (X)

21.Sources (List books, documents, surveys, personal interviews and their dates.)

Carpinteria Valley Museum of History, photo archives, file folders marked Agriculture-General, Rincon, and Roads; Ventura County Assessor's and Recorder's Office records; General Services Agency-Recreation Services' file on Glenrose, the Abbott Ranch; Ventura County Great Register and Index, 1873-1890, 1900 through 1932. (See continuation sheet.)

22.Date form prepared: January 16, 1990
By: Gloria Scott
Organization: Caltrans
Address: 650 Howe Ave.
City: Sacramento **Zip Code:** 95825
Phone: (916) 920-7679

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19.Historical and/or Architectural Importance: (Continued.)

Among the first to purchase land from Dr. Biggs were Milton Sprague Dimmick and his father, Elmer D. Dimmick, who bought adjoining parcels in 1876. "1 June 1876 . . . I saw in a Santa Barbara paper that [M.S.] Dimmick had bought some land over $9,000 worth I think . . .I believed you mentioned this to me some time ago but I forget." (Brown, undated typescript, p.7) Milton Dimmick's property consisted of 51 acres, which makes up the greater part of the Abbott Ranch today. Ventura County Assessor's records date to the creation of the county in 1873. Between 1873 and 1876, Dr. Biggs is listed as the owner of the property and no improvements were assessed. The records for 1877-78, however, indicate that M.S. Dimmick, owner of 51 acres of Rancho El Rincon, was assessed for improvements to the property, most likely the construction of the farm house.

Milton Dimmick was born in 1850 in Susquehanna County, Pennsylvania to Elmer D. and Julia A. (Smith) Dimmick. After a period of years spent in Monona County, Iowa, the family emigrated to Santa Barbara County in 1873. Within three years, Milton Dimmick acquired his own property, adjacent to his father and brother; by 1879, he was married to Ella Colby Dimmick, whose family had also emigrated to the Carpinteria area. By the mid-1880s, the ranch received the name Glenrose and was planted to walnuts, the premier tree crop of the Carpinteria area in the nineteenth century. According to an entry in Thompson and West's 1883 *History of Santa Barbara and Ventura Counties*, "Here he has a lovely place of 51 acres, highly improved and beautifully ornamented with trees, shrubbery, which flourish with remarkable luxuriance in this fertile soil. This fine place, when Mr. Dimmick began his improvements in 1876, was a monte of brush, elders and sycamores, which have given away before the industry and indomitable energy of the owner and it is now transformed into one of the handsomest and happiest homes of this pleasant region." The 1880s also witnessed the addition of two daughters into Milton Dimmick's family: Carrie Julia (born 1880) and Mabel Martha (born 1882), who grew up to be "ranchwomen" and nurses, ultimately owning and residing at the ranch into the opening decades of the twentieth century.

Fourteen years after purchasing the ranch, building a home, establishing a family and planting the ranch to walnuts, Milton Dimmick died (in Los Angeles County, in 1890) at the age of forty. According to the decree of distribution for his estate, his widow and children inherited this ranch (also known as the Dimmick Walnut Orchard), as well as neighboring property in Santa Barbara County and a house lot in Los Angeles County. It is unclear whether Mrs. Dimmick and her daughters lived full- time at the ranch or in Los Angeles between 1892 and 1900, at which time census records show that they were living in Los Angeles. The Dimmicks, nonetheless, did maintain the Rincon Valley property as a walnut orchard. Although he was one of several early settlers in the Rincon Valley, research did not reveal that Milton Dimmick made any significant contributions to the history and development of the area during his fourteen years at the ranch. Rather, he was a typical farmer cultivating proven crops, whose main distinction, apparently, was the maintaining (now-gone or greatly altered) ornamental gardens.

In 1901, Mrs. Dimmick married Reverend Jerome F. Tubbs, a minister at the Church of the Redeemer in Los Angeles. Records indicate that they were married in Los Angeles, that Reverend Tubbs closed his pastorate in Los Angeles and moved to Santa Barbara County for reasons of health (Franklin Harper, 1913, p.572) circa 1904, where he became minister of the Presbyterian Church in Carpinteria. This suggests that Mrs. Dimmick met Reverend Tubbs while residing in Los Angeles, after which they returned to the Rincon Valley property. The ranch apparently remained unchanged in appearance until about the time of the Dimmick/Tubbs marriage. A photograph appearing in the 1912 edition of the *Chamber of Commerce Annual Carpinteria Valley News* depicts the farm house and tank house surrounded by walnut orchards, with the old county road close to the house. When comparing the photograph to an 1883 engraving in Thompson and West's atlas, the only visible change to the house is the addition of the wrap-around porch. Recent on-site inspection of also places this alteration between 1900 and 1910.

(See continuation sheet.)

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19.Historical and/or Architectural Importance: (Continued.)

By 1910 Reverend and Mrs. Tubbs, along with the Dimmick daughters, were again residing at the ranch, known appropriately as the Tubbs Ranch. Sometime after 1900 Reverend Tubbs had purchased approximately 10 acres of the old Rancho El Rincon adjacent to the Dimmick property. Deed records indicate that in 1912, Reverend Tubbs conveyed this property to his wife, Ella Dimmick Tubbs, who in turn conveyed the property to her unmarried adult daughters, Carrie J. and Mabel Martha, on the same day. According to Ventura County *Great Registers*, Reverend Tubbs does not appear as a registered voter living at the ranch until the years 1904-1906, then again between 1912 and 1918. In addition to Reverend Tubbs, the 1912 edition of the *Great Register* revealed that Ella Dimmick Tubbs, and her daughters, Carrie (housekeeper) and Mabel Martha (nurse) were registered as Republicans. Mrs. Tubbs died in 1913 at the age of 59; the daughters (occupations: ranchwomen/nurses) and Reverend Tubbs (occupation: ranchman) stayed on at the ranch until 1918. In 1918, Reverend Tubbs married another widow, Elsie Andrews and moved into her home in Carpinteria. Milton and Ella Dimmick's daughters, who remained unmarried, moved into the City of Santa Barbara circa 1920, always registered as Republicans but variously listed as teachers, as nurses, and "at home." (Carrie J. Dimmick was sometimes listed as Carrie, Caroline or Carolyn in the various public records, but she is always shown residing with Mabel Martha.)

Except for a brief period of time when they resided in Los Angeles, it appears that the Dimmick daughters/sisters lived at the ranch from the time of their births in the 1880s until 1918 or shortly thereafter, a period of approximately 38 years. During their residence at the ranch, walnuts continued to be the major tree crop. Between 1910 and 1918, the appearance of the ranch remained relatively unchanged, as noted in the above- mentioned photograph from this era and physical evidence at the ranch. The house, however, was modified slightly by the addition of the roof dormers and possibly by a slight expansion of the north elevation to accommodate a pantry. Materials used for interior details in the pantry enjoyed popularity through the 1920s and 1930s, however, and do not conclusively point to a late 1910s alteration. Likewise, the building's form and type of exterior materials point to either a major remodeling of an earlier addition or to a late 1920s addition. While possibly the longest residents of the property, Carrie J. and Mabel Martha Dimmick appeared to have led commonplace lives that were unremarkable in terms of the agricultural development of the ranch or the region. Likewise, there is no evidence that either one made significant contributions to the community.

Reverend Tubbs was apparently quite a self-promoter and jack-of-all-trades, as revealed by Franklin Harper's 1913 edition of *Who's Who on the Pacific Coast* and Carpinteria Chamber of Commerce literature. For example, the June 1912 edition of the *Chamber of Commerce Carpinteria Valley News*, of which Reverend Tubbs was then president, extols the virtues of the man and his ranch, "Jerome F. Tubbs, scholar, minister, successful business man, practical rancher, president of the Carpinteria Chamber of Commerce, vice president of the Commercial and Savings Bank of Carpinteria, owns one of the finest ranches in the valley, located at the eastern end where the Rincon canyon widens out into broad and beautiful slopes. There are 51 acres, three- fourths of which are given over to walnuts. Dr. Tubbs is one of the progressive men always ready to help every good cause."

Reverend Tubbs lived periodically at the Rincon Valley Ranch for approximately eight years. By 1920, he was already living in Carpinteria, although he and the Dimmick sisters retained ownership of the ranch until 1923. From 1904 until the 1920s, Tubbs' identified himself as a minister, rancher and businessman. These endeavors, nonetheless, were unexceptional in terms of significant contributions to the community or the region. The property was already well-established as a walnut orchard; he practiced his ministry for only a brief time after moving to the Carpinteria area, and he was just beginning to make a mark on the business community while living at the ranch. His greatest contribution to the Carpinteria area was to occur upon his departure from the ranch. In the mid-1920s, Reverend Tubbs became a Justice of the Peace in Carpinteria. According to local histories and public records, he is best remembered for his contributions in this profession, as well as for the business activities in which he was involved after he sold the ranch.

(See continuation sheet.)

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19.Historical and/or Architectural Importance: (Continued.)

Documentation is sketchy regarding Tirey C. Abbott, who bought the ranch from Reverend Tubbs and the Dimmick sisters in 1923. Information was obtained mainly from oral history provided by his son, Duncan H. Abbott (the current owner), local directories and public records. Tirey C. Abbott arrived in the Carpinteria c.1922, whereupon he purchased the ranch in 1923 and set up residence. Available Ventura County *Great Registers* list Tirey Abbott as early as 1926 as a farmer and a Republican. Also listed is Mrs. Annie Abbott, housewife. Whether she was related (as wife or mother) to Mr. Abbott is not specified in these records. By 1932, however, Mr. Tirey Abbott, and wife, Margaret H. Abbott, are listed. Available telephone directories list the Tirey C. Abbotts at this "Rincon Ranch Canyon Road" address from 1926 until at least 1948. Issues of the *Avocado Yearbook* from the 1930s and 1940s list Tirey Abbott as a member and grower from the Carpinteria area. Biographical information on Tirey Abbott, however, was not located in this publication, or in published Santa Barbara and Ventura Counties atlases or Carpinteria area histories.

In 1923, the ranch was planted mostly to walnuts, with some land devoted to bean cultivation. Shortly after acquiring the property, Tirey Abbott gradually began to change tree crops, planting the first avocado trees in the mid-to-late 1920s. Lemon trees were also introduced into the Abbott Ranch orchards. Today, the orchards are comprised of approximately two-thirds avocados and one-third lemons. According to historical records, lemon cultivation was thriving by 1912, and John Henry Shepard (whose ranch was also in Rincon Valley) is credited as the first citrus grower in Carpinteria. Literature of the period, particularly the *Avocado Yearbook*, published by the California Avocado Growers Exchange, indicate that by the 1920s, avocado cultivation was already flourishing in both Santa Barbara and Ventura Counties. This coastal region, including Carpinteria and the Rincon Valley, possessed the ideal combination of climate and soil conditions for cultivating avocados as well as lemons. Like the Dimmicks and Reverend Tubbs before him, and rather than departing radically from the agricultural traditions of the region, Tirey Abbott cautiously changed the composition of the property's orchards from one tried-and-true tree crop to a proven-successful combination of crops.

Tirey Abbott's family remained on the ranch through the middle years of the twentieth century, after which the house was rented to tenants and the lands continued, under Abbott's ownership, to produce lemons and avocados. In the 1980s, Duncan Abbott acquired the property from his father; the Duncan Abbott family now resides in the house. Mr. Abbott continues to run the family business -- growing avocados and lemons. According to local news articles as well as to members of the Carpinteria Valley Museum of History, Duncan Abbott's wife, "Ky," enjoys a growing reputation in the region as an artist.

Not long after Tirey Abbott's purchase of the property, the physical lay-out of the ranch began to change. In 1927, Santa Barbara County re-aligned the county road that meandered through Mr. Abbott's property and eventually joined the Casitas Pass Road (at the present junction of Route 150 and Route 192). In the process, two bridges were built over Rincon Creek (Bridges #51-140 and #51-141), and the roadway was constructed to follow the creek more closely. In the process, the barn had to be moved (to its present location) and the entrance drive to the house was re-oriented. Apparently, Tirey Abbott also utilized two naturally occurring oaks as "entry posts" for the re-oriented ranch road. Sometime between 1900 and 1927, a house that formerly stood in the same vicinity as the barn's first location by the creek, was removed. Whether it was demolished or moved is not known.

(See continuation sheet.)

19.Historical and/or Architectural Importance: (Continued.)

A single man when he acquired the ranch in 1923, Tirey Abbott got married in 1929. While the basic tree crop composition did not change from the avocados and lemons he started to plant in the late 1920s, the physical appearance of the house and its immediate surroundings changed dramatically to accommodate the expanding Abbott family. According to Duncan Abbott, his father increased the size of the house upon his marriage in 1929. At this time the living room and bedrooms on the west and south elevations were significantly enlarged, a stucco chimney was cut through the north wall of the living room, and the kitchen/pantry area was expanded. Architectural evidence supports this construction date. The original portion of the house and these additions are uniformly clad in the same redwood siding and have identical surrounds on the paired 2/2 windows and on the door surrounds; the 2/2 windows and French doors and most of the interior detailing in the house all appear to have been manufactured in the late-1920s to early-1930s and are reminiscent of Period Revival detailing. It appears that Tirey Abbott made a conscious effort to ensure these major alterations would have a unified appearance. The mid-1930s witnessed more changes when a room-size, enclosed "sleeping porch" was added to the southeast corner of the house, a playhouse and assorted sheds were built behind the house, and a foreman's house was constructed northeast of the main house. Around 1940, the tank house was razed with the salvaged materials used in the construction of "shop", which was connected to the rear of the house, on the site of the tank house. A portion of the porch was enclosed with glass panels in the 1940s; sometime between 1923 and 1980 the rest of the porch roof was removed. The garage and carport were constructed behind the house after the 1940s. A flurry of remodeling activity greeted the 1980s when the current owners considerably enlarged the earlier kitchen addition, added another chimney, installed a large, open deck to the rear of the new kitchen extension, and constructed a shed-roof art studio behind the small 1930s-1940s outbuildings.

Alterations and additions to the Abbott Ranch house and grounds during the period from 1929 through the 1950s dramatically changed the appearance of the property from a nineteenth century rural property to a 1930-1950s ranch. Additions built in the 1980s further modified the character of the ranch, the house in particular. The cumulative effect of these twentieth-century changes to the house and grounds have transformed the character of the property. Still evocative of a rural, agricultural complex, the Abbott Ranch, nevertheless, does not retain the requisite integrity for nineteenth-century associative values as required by the National Register criteria. Additionally, historical research did not reveal evidence that M.S. Dimmick or his family were prominent within the context of Carpinteria, Santa Barbara County, or Ventura County history and development; Reverend Tubbs' rose to limited prominence after he sold the ranch. There are more intact examples of turn-of-the-century rural houses and ranches that better reflect the theme of agriculture in the Carpinteria area.

While the 1980s alterations somewhat changed its 1929- 1950s character, the Abbott Ranch retains physical integrity for associative values with Tirey Abbott. In order to be eligible for National Register listing when the property's period of significance is less than 50 years old, however, a property must have **exceptional** significance. The peak of avocado and lemon cultivation at the Abbott Ranch occurred within the last fifty years and Tirey Abbott appears to have been a typical grower, rather than an innovator. The ranch, therefore, does not have exceptional significance or associations. Further, there is not enough historical perspective to adequately evaluate this property in relation to the "broad event" of agricultural development in the Carpinteria area.

It should be noted that in 1989, the owner of the Abbott Ranch applied to the Ventura County Cultural Heritage Board for local historical landmark designation; he subsequently withdrew his application. Although not officially designated or listed, the Ventura County Cultural Heritage Board thinks that the Abbott Ranch meets its local criteria. The Abbott Ranch was evaluated with consideration given to the Board's opinion, but the property does not appear to eligible for inclusion in the National Register of Historic Places, at the local, state or national level of significance.

CALIFORNIA DEPARTMENT OF TRANSPORTATION
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Project: 05-SB150, 1.1/1.9 (Abbott Ranch)

21.Sources: (Continued.)

Arellanes, Luis, "Early Ventura History," *Quarterly*. Spring, 1982; Santa Barbara City and County Telephone Directories, 1909-1948; Blow Ben, *California Highways*, 1920; Brown, Henry M., *Foreword and Introduction to the Letters of Dr. Mathew [sic] Biggs to Dr. Bates, 1870- 1887*, undated typescript at the Carpinteria Valley Museum of History; *Chamber of Commerce Annual Carpinteria Valley News*, June 1912; Clark, Arthur Miller, *From Grove to Cove to Grove*, 1962; Cowan, Robert G., Ranchos of California, 1977; Guinn, J.M., *A History of California and an Extended History of Its Southern Coast Counties*, 1907; Harper, Franklin, *Who's Who on the Pacific Coast*, 1913; Harper, Pamela, "Caltrans plan could wreck peaceful life," *Santa Barbara News-Press*, August 13, 1989; L.M. McKenney & Company, *Coast County Directory of Santa Cruz, San Diego, Ventura, Monterey, San Benito, Santa Barbara, Los Angeles and San Luis Obispo Counties, 1884-85*; O'Neill, Owen H., *History of Santa Barbara County*, 1939; Santa Barbara City and County Directories, 1904-1948; Stockton, Georgia, *La Carpinteria*, 1960; Storke, Mrs. Yda Addis, *A Memorial and Biographical History of the Counties of Santa Barbara, San Luis Obispo and Ventura, California, Illustrated*, 1891; Thompson and West. *History of Santa Barbara and Ventura Counties*, 1883; Title Insurance and Trust Company, *The Story of Ventura County*, 1956; Wood, Clyde W., Contractor, *Final Report for the Construction of a Secondary State Highway ...West Casitas Pass in the County of Ventura ...Contract No. 67XC8-47XC8,...Road VII-Ven-151-B, 2.92 Miles*, 1934.

U.S. Army Corps of Engineers, War Department Topographic Map, 7.5 Minute Series, Carpinteria Quadrangle, 1943; U.S. Geological Survey Topographic Map, 7.5 Minute Series: Carpinteria Quadrangle, 1952, White Ledge Peak Quadrangle, 1952, and 15 Minute Series, Ventura Quadrangle, 1904 (reprints in 1910, 1919, 1921, 1938, 1946), and 1941; Ventura County Assessor's Parcel Map, Book 8 Page 16.

Interviews with Duncan Abbott, owner of Abbott Ranch (11/28/89); Katherine E. Garner, staff to the Ventura County Cultural Heritage Board (8/21/89, 10/26/89, 1/10/90); David W. Griggs, Director, Carpinteria Valley Museum of History (1/11/90); Charles Johnson, Librarian, Ventura County Museum of History and Art (1/10/90).

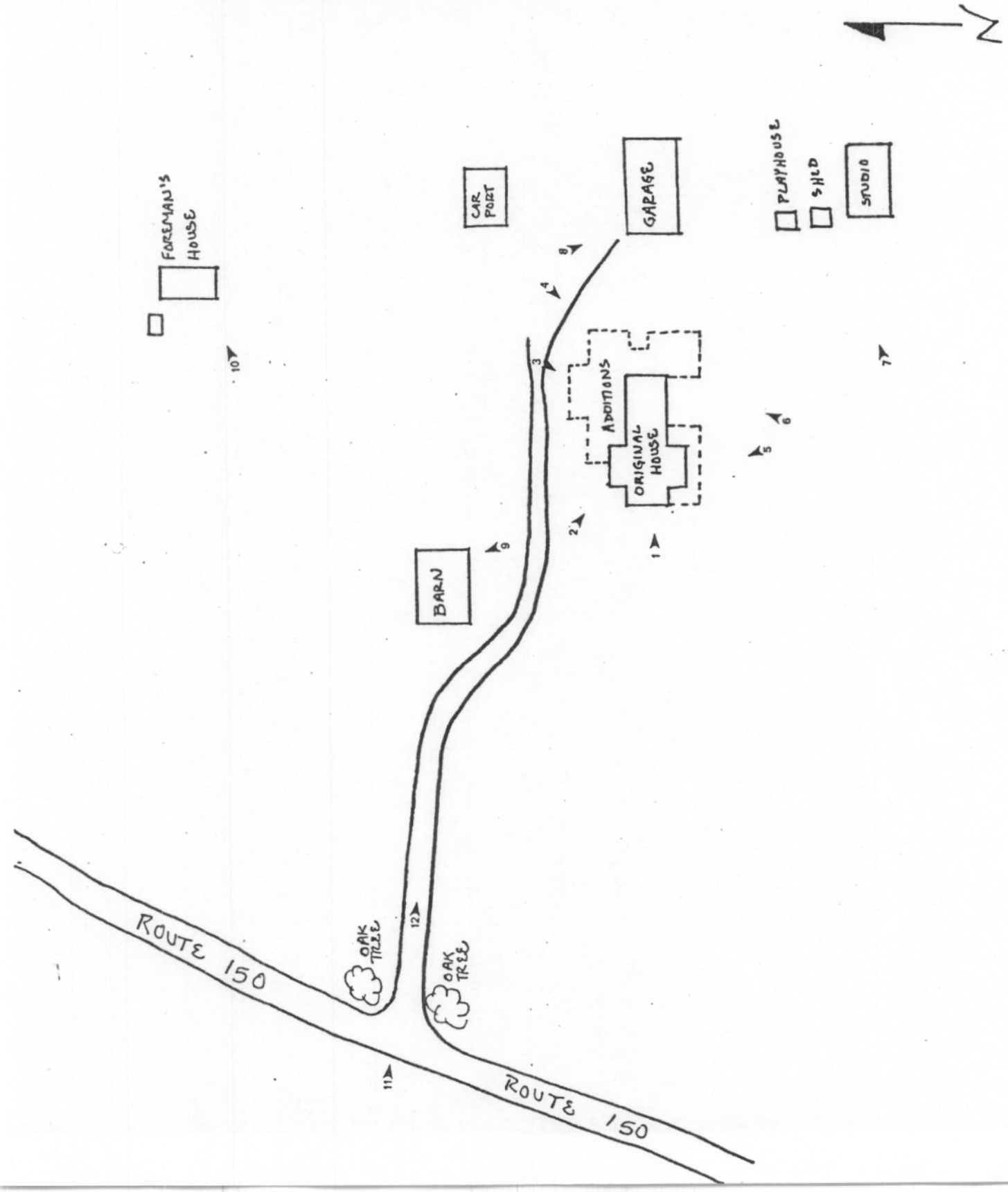
56-152756

56-152756

CALIFORNIA DEPARTMENT OF TRANSPORTATION
ARCHITECTURAL INVENTORY/EVALUATION FORM
Project: 05-SB150, 1.1/1.9 (Abbott Ranch)

MAP REFERENCE NO. 1

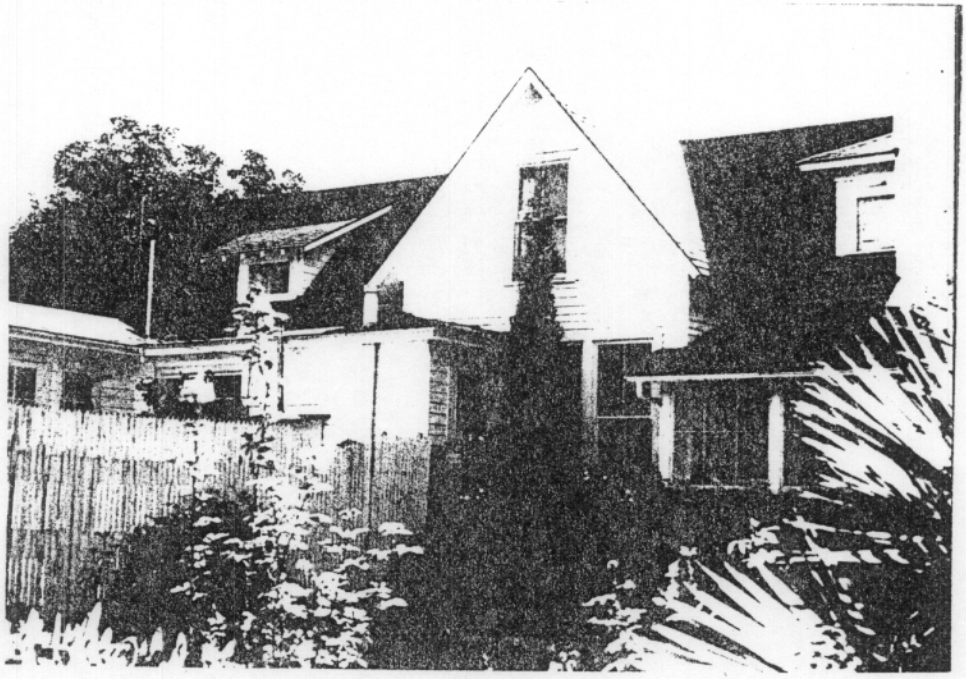
PHOTO VIEW AND LOCATION SKETCH MAP



CALIFORNIA DEPARTMENT OF TRANSPORTATION
ARCHITECTURAL INVENTORY/EVALUATION FORM
Project: 05-SB150, 1.1/1.9 (Abbott Ranch)

MAP REFERENCE NO. 1

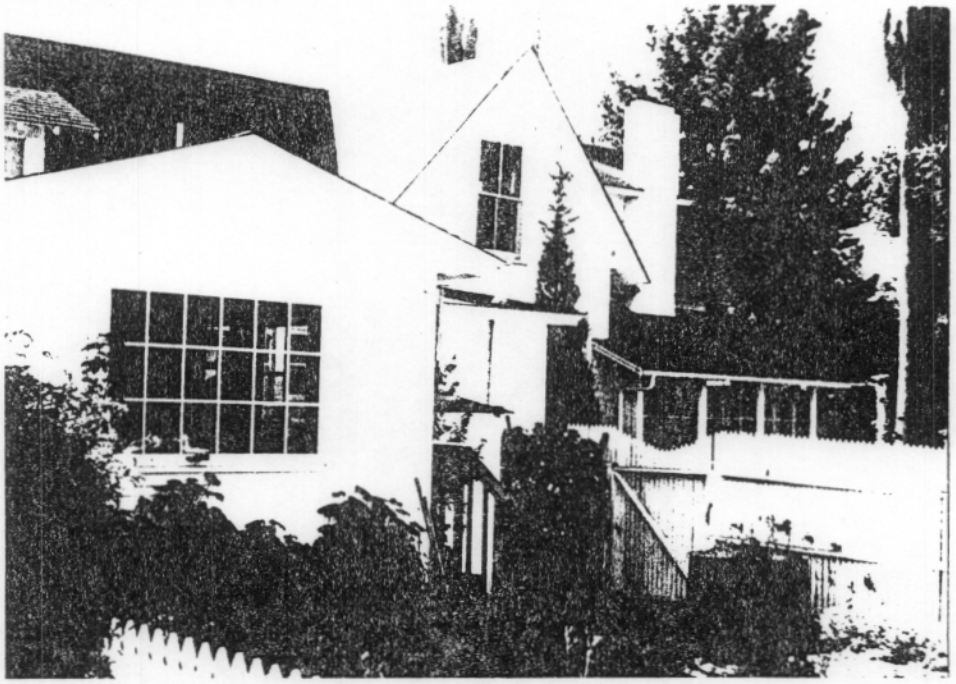
1) West elevation depicting original gable end. Paired windows and porch are early twentieth century additions.



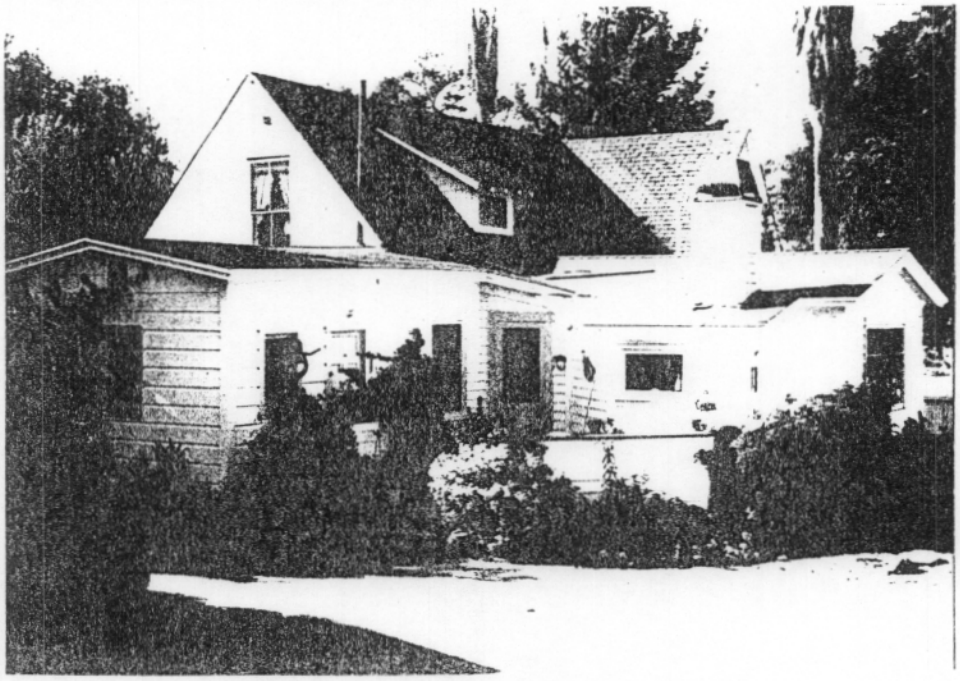
2) North elevation looking southeast. Gable end is original; dormers, one-story addition, glazed porch and paired windows are early-to-mid-twentieth century additions.

CALIFORNIA DEPARTMENT OF TRANSPORTATION
ARCHITECTURAL INVENTORY/EVALUATION FORM
Project: 05-SB150, 1.1/1.9 (Abbott Ranch)

MAP REFERENCE NO. 1



3) North elevation looking northwest. Chimney and glazed porch are early-twentieth century additions; gabled one-story extension is c.1980 addition.

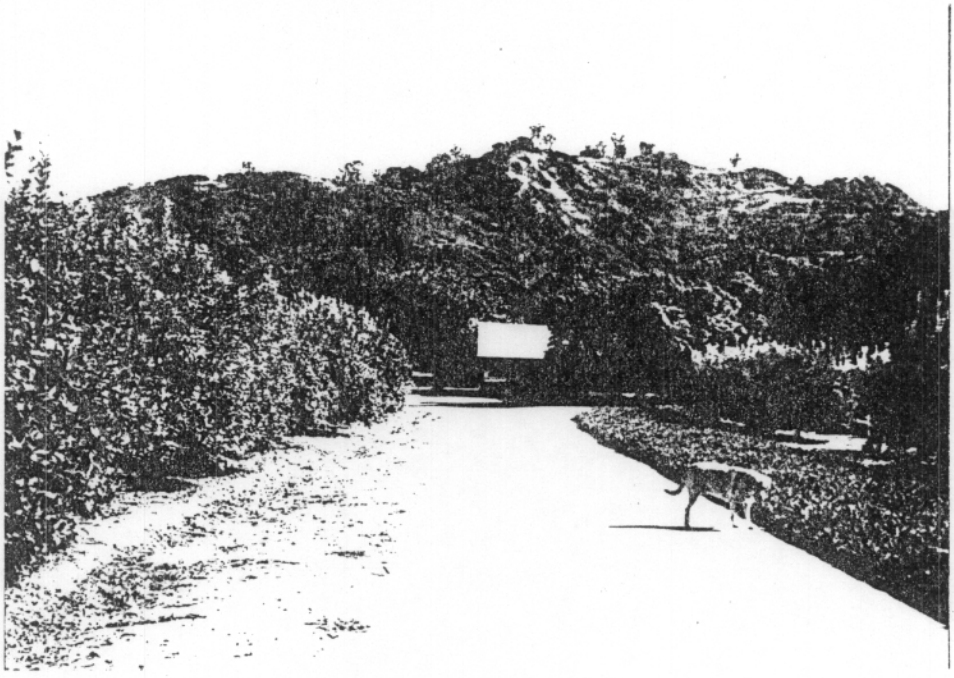


4) Three-quarter view of north and east elevations looking southwest. One-story addition to the right is c.1980; one-story addition to the left is c.1940.

CALIFORNIA DEPARTMENT OF TRANSPORTATION
ARCHITECTURAL INVENTORY/EVALUATION FORM
Project: 05-SB150, 1.1/1.9 (Abbott Ranch)

MAP REFERENCE NO. 1

11) View of Abbott Ranch entrance, looking east from Route 150. Trees in foreground frame entrance drive that was created in the late 1920s when the old county road was re-aligned and constructed in this location.



12) View of Abbott Ranch looking east from entrance drive. The barn is in center of picture. The house is to the right and is completely obscured by mature trees.

56-152756

State of California Business, Transportation and Housing Agency

MEMORANDUM

To: Chuck Cesena

Date: May 15, 1990

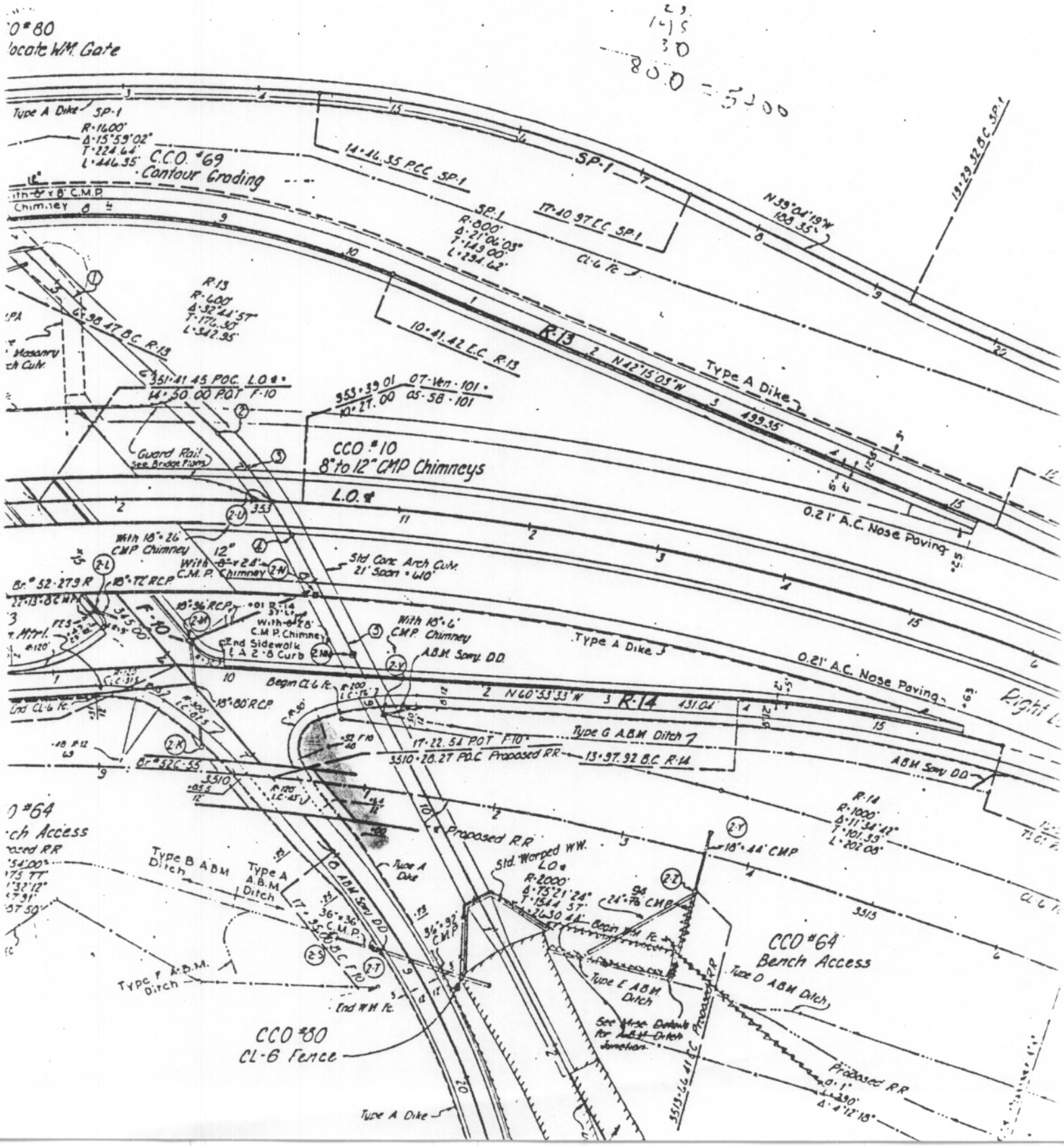
File: 5-SB-150 1.1/1.5
5201 282801
Rincon

From: Wendy Waldron
DEPARTMENT OF TRANSPORTATION
District 5, San Luis Obispo

Subject: Review of staging area for construction of fish ladder

I have reviewed the area highlighted in yellow (map attached) which will be used as the staging area for construction of a fish ladder associated with the above-referenced project. There is no potential for impact to cultural resources by use of this area as described by yourself and Lien Nguyen. No further cultural resources studies are required unless project plans are changed to include areas not covered by this memo.

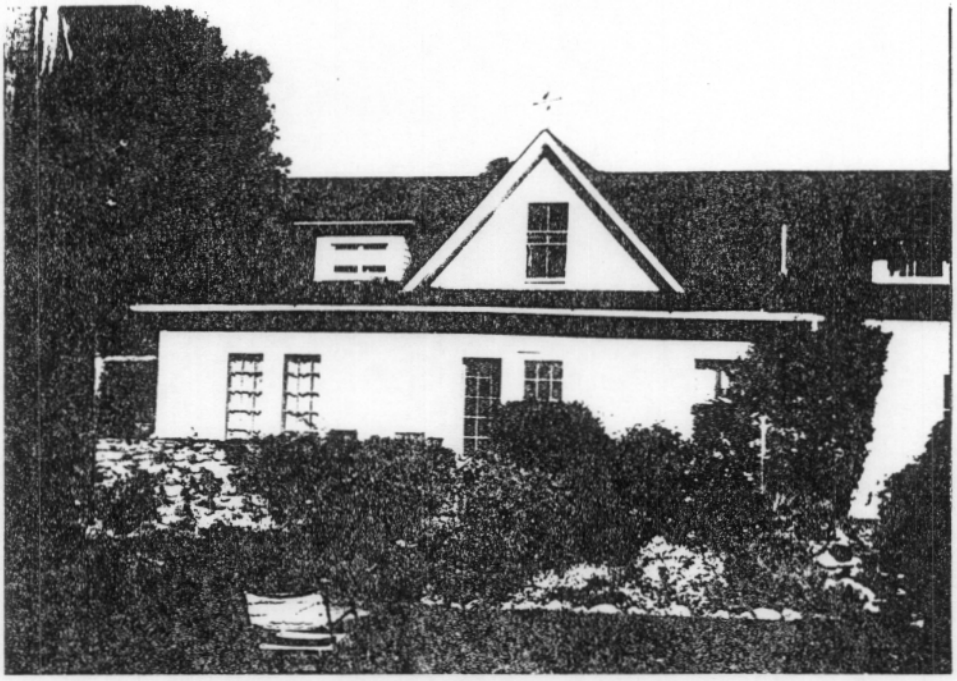
56-152756



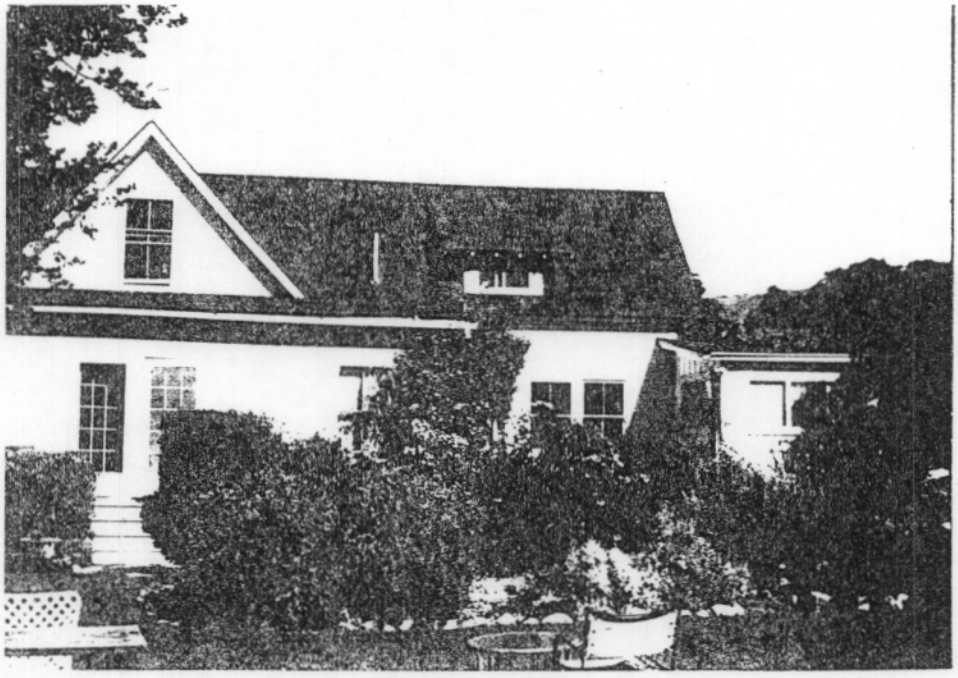
Type A Dike
SP-1
C.C.O. #69
Contour Grading
14+46.35 P.C.C. SP-1
17+40.97 E.C. SP-1
R-13
10+41.42 E.C. R-13
N 42°15'03" W
Type A Dike
CCO #10
8" to 12" CMP Chimneys
L.O.
0.21' A.C. Nose Paving
Guard Rail
See Bridge Plans
With 18"x26" CMP Chimney
With 8"x24" C.M.P. Chimney
Std Conc Arch Culv.
21' Span = 610'
With 18"x6" CMP Chimney
End Sidewalk
A.B.M. Spwy. D.D.
Type A Dike
0.21' A.C. Nose Paving
N 60°53'33" W
R-14
Type G A.B.M. Ditch
17+22.54 P.O.T. F-10
3510+28.27 P.O.C. Proposed RR
13+97.92 B.C. R-14
A.B.M. Spwy. D.D.
Proposed R.R.
Std. Warped W.W.
L.O.
Type B A.B.M. Ditch
Type A A.B.M. Ditch
Type A Dike
Type F A.B.M. Ditch
End W.M. Fc.
CCO #80
CL-6 Fence
CCO #64
Bench Access
Type D A.B.M. Ditch
Type E A.B.M. Ditch
See Misc. Details for A.B.M. Ditch Junction
Proposed R.R.
Type A Dike

CALIFORNIA DEPARTMENT OF TRANSPORTATION
ARCHITECTURAL INVENTORY/EVALUATION FORM
Project: 05-SB150, 1.1/1.9 (Abbott Ranch)

MAP REFERENCE NO. 1



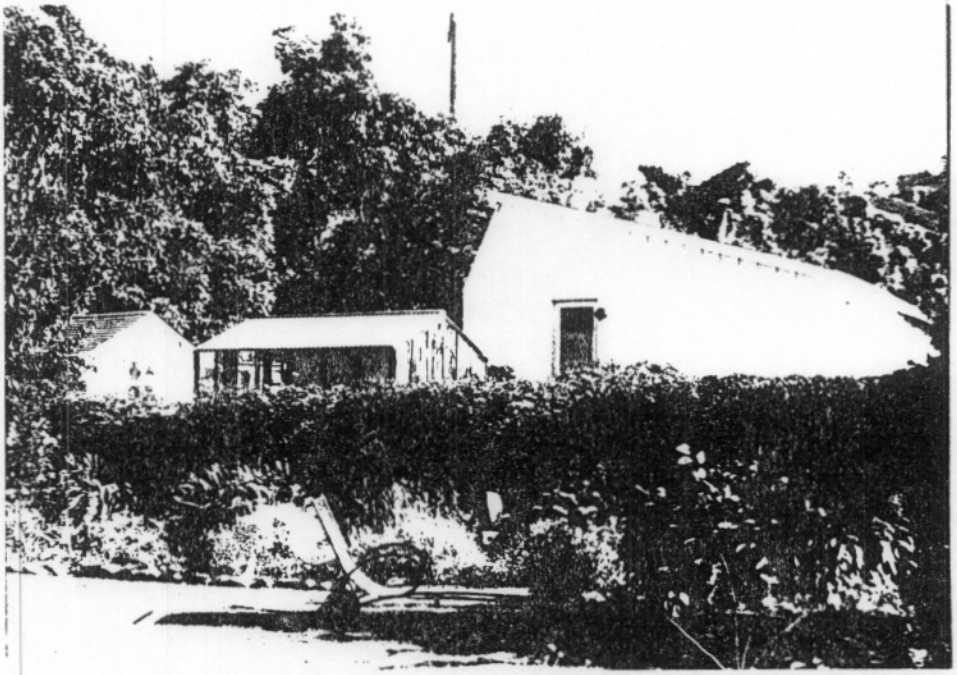
5) South elevation at southwest corner. Stone wall is remnant of porch; shed roof extension across façade is 1929 addition.



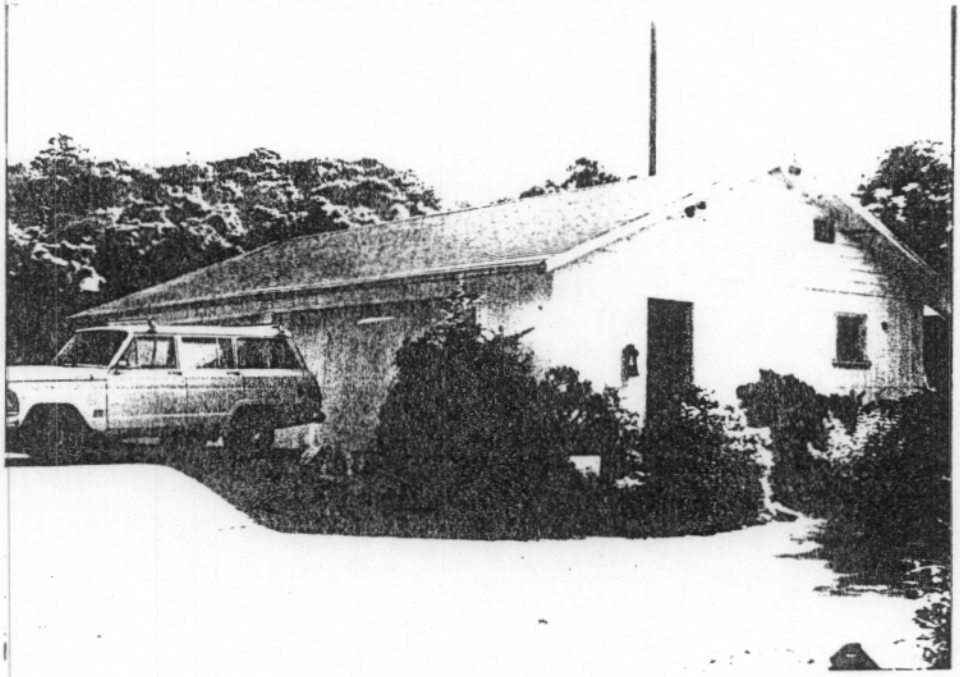
6) South elevation at southeast corner. Shed-roof addition in right corner was constructed in 1935.

CALIFORNIA DEPARTMENT OF TRANSPORTATION
ARCHITECTURAL INVENTORY/EVALUATION FORM
Project: 05-SB150, 1.1/1.9 (Abbott Ranch)

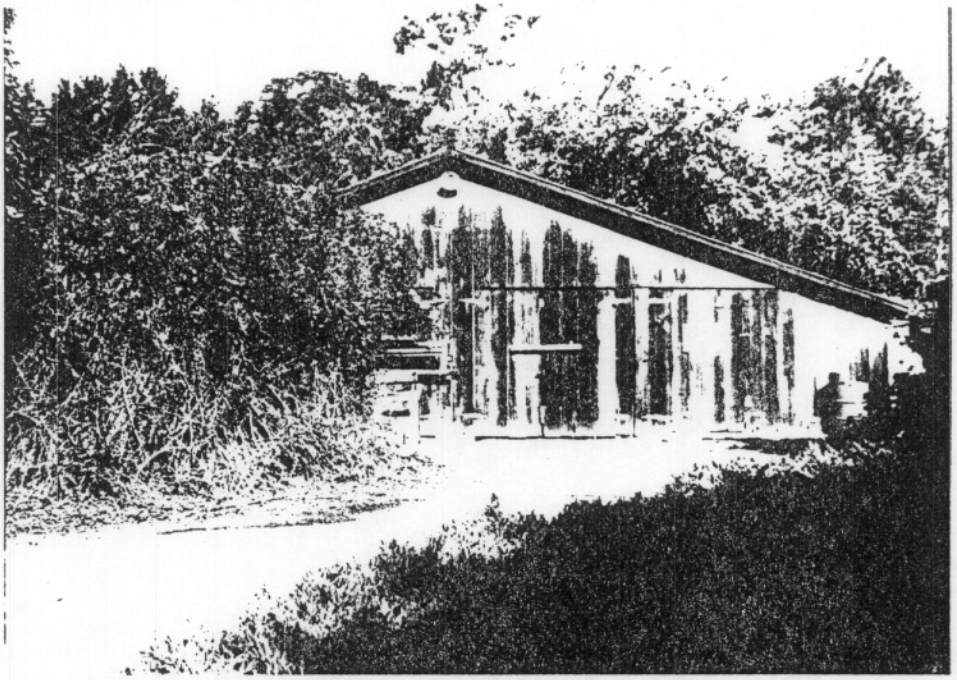
MAP REFERENCE NO. 1



7) View looking east. Hedge in foreground encircles a side yard and garden south of the main house. Shed-roof studio to the right was constructed in the 1980s; playhouse and shed to the left were constructed c.1935.



8) View looking southeast. Garage behind the house.



9) Barn, south elevation. Barn was moved to this location northwest of the house and east of its original location in the late 1920s.

10) Foreman's cottage, 3/4 view of south and west elevations. House was constructed in 1935.

***Recorded by:** Susan Zamudio-Gurrola ***Date:** June 17, 2019 ☐ Continuation ☒Update

The subject property consists of an approximately 200 foot segment of the SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line which is located in the current project's APE. The entire transmission line spans approximately 34 miles between the SCE Santa Clara Substation (built in 1958) and the SCE Santa Barbara Substation (built in 1925), and is segmented by the SCE Casitas Substation (built in 1924) near State Route 33. An additional 8.35-mile segment stems north from approximately Manuel Canyon Road in Ventura to the SCE Ojai Substation (built in 1967). The line includes steel lattice towers, tubular steel poles, and wooden poles. The segment of the line passing through and adjacent to the project APE is located parallel to Highway 150 / Casitas Pass Road approximately 3.75 miles northeast of the city of Carpinteria. The ranch properties fronting the road are private property and the transmission line was observable only from the public right-of-way (road).

The transmission line was previously evaluated in 2012 by Wendy L. Tinsley Becker of Urbana Preservation & Planning as part of the Historical Resource / Historic Property Survey Report for the Southern California Edison Company Santa Barbara County Reliability Project. Becker reported that portions of the line, from Casitas Substation to Santa Barbara Substation, were initially constructed in 1932 at a 60kV capacity approximately 20 years after SCE implemented a 60/66kV capacity system wide, and the remaining portions of the line, from Casitas Substation to Santa Clara and to Ojai Substation date from 1956 and later. Modifications occurred throughout the 1960s and 1970s including the removal of original wood poles and towers, installation of new tubular steel poles, reconfiguration at substations, and an extension to the Ojai Substation built in 1967. Becker assigned the Santa Clara-Ojai-Santa Barbara 66kV Transmission Line a California Historical Resource Status Code of 6Z, meaning "Found ineligible for NR, CR or Local designation through survey evaluation."

The current survey update of the subject property was conducted on June 14, 2019 as part of the Cultural Resources Assessment report for the Ventura-Santa Barbara Counties Intertie Project, Counties of Ventura and Santa Barbara. Based on examination of the segment of the SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line that is located in that project's APE, it appears largely as described at the time of its last evaluation and no information was uncovered to suggest the property would now be eligible for listing in the NRHP, CRHR or for local designation.

References:

Becker, Wendy L. Tinsley. 2012. State of California Department of Parks and Recreation (DPR) 523 series forms for SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line (P-56-153060). On file, South Central Coastal Information Center, California State University, Fullerton.

Portion of line (steel poles) adjacent to project APE on north side of Highway 150/Casitas Pass Road, 6-14-19.

Portion of line (wood pole) adjacent to project APE on south side of Highway 150/Casitas Pass Road, 6-14-19.

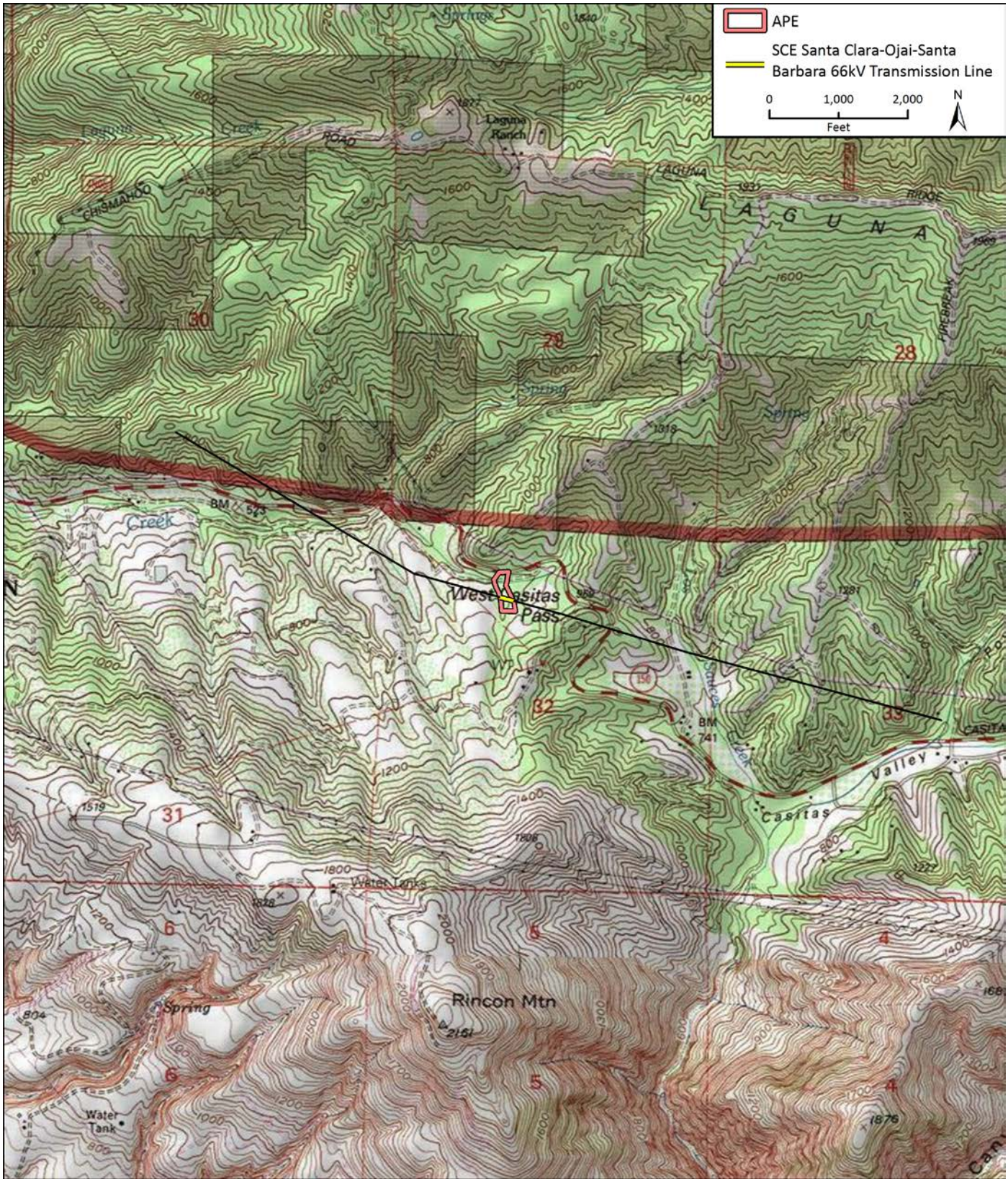
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary # P-56-153060
HRI#
Trinomial

Page 2 **of** 2 ***Resource Name or #:** SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line

***Map Name:** USGS *White Ledge Peak* Quadrangle ***Scale:** 1:24,000 ***Date of Map:** 1995 (2000 edition)



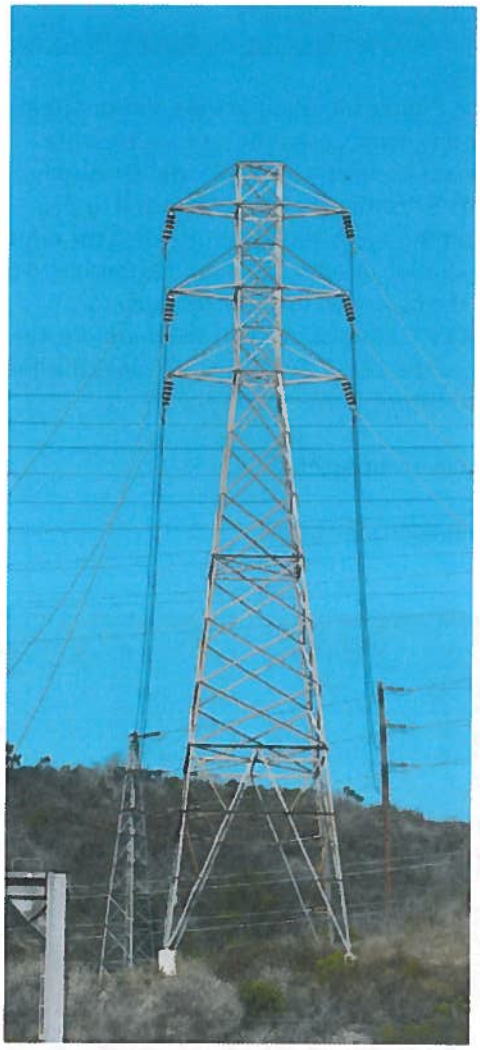
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary#: _____
HRI #: _____
Trinomial: _____
NRHP Status Code: 6Z
Other Listings: _____
Review Code _____ Reviewer _____ Date _____

Page 1 **of** 16 ***Resource Name or #** SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line
P1. Other Identifier: None
***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted**
***a. County** Ventura and Santa Barbara Counties
***b. USGS 7.5' Quad:** see P2e below Date: _____ **T** _; **R** _; _ ¼ of _ ¼ of **Sec** _; **B.M.** _____
c. Address: n/a City: n/a Zip: n/a
d. UTM: (Give more than one for large and/or linear resources) Zone 11, _____ mE/ _____ mN
e. Other Locational Data:

***P3a. Description:**
The Santa Clara-Ojai-Santa Barbara 66kV Transmission Line spans approximately 34-miles between the SCE Santa Clara Substation (built in 1958) and the SCE Santa Barbara Substation (built in 1925), and is segmented by the SCE Casitas Substation (built in 1924) near State Route 33. An additional 8.35-mile span stems north from Manuel Canyon Road in Ventura (approximate location) to the SCE Ojai Substation (built in 1967). Available records disclose that the line is constructed to include steel lattice towers (double circuit standard and double circuit anchor), tubular steel poles, and wooden poles.

***P3b. Resource Attributes:** HP11: Engineering Structure (Transmission Line)
***P4. Resources Present:** ☐Building ☒Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)



***P5b. Description of Photo:**
View of Typical Steel Lattice Transmission Tower at the Santa Clara Substation
Image Source: Urbana Preservation & Planning, LLC.

***P6. Date Constructed/Age and Source:**
☒Historic, 1932/1956-forward

***P7. Owner and Address:**
Southern California Edison Co.
2244 Walnut Grove Avenue
Rosemead, CA 91770

***P8. Recorded by:**
Wendy L. Tinsley Becker, RPH, AICP, Principal
Urbana Preservation & Planning, LLC
www.urbanapreservation.com

***P9. Date Recorded:** September 2012

***P10. Survey Type:**
Intensive Level
CEQA / NHPA §106 Survey

***P11. Report Citation:** Urbana Preservation & Planning, LLC, *Historical Resource / Historic Property Survey Report - Southern California Edison Company Santa Barbara County Reliability Project*, September 2012, Revised October 2012.

***Attachments:**
☐NONE ☒Location 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):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary #: _____
HRI #: _____

BUILDING, STRUCTURE, OBJECT RECORD

***NRHP Status Code**: 6Z ***Resource Name or #** SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line

B1. Historic Name: Multiple (Santa Clara-Carpinteria 66kV; No. 1 Santa Clara-Santa Barbara 66kV; No. 2 Santa Clara-Santa Barbara; Santa Clara-Carpinteria-Santa Barbara 66kV; and Santa Clara-Santa Barbara 66kV

B2. Common Name: SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line

B3. Original Use: Electric Power Conveyance System / Transmission Line

B4. Present Use: Electric Power Conveyance System / Transmission Line

***B5. Architectural Style:** N /A – Utilitarian Electrical Engineering Power Conveyance System with Tubular Steel Poles, Steel Lattice Towers, and Wooden Poles.

***B6. Construction History:** A 23-mile portion of the line appears to have been constructed in 1932 from the Casitas Substation (built in 1924) easterly to the Santa Barbara Substation (built in 1925), however original sections appear to have been removed and / or reconfigured between Miles One thru Three (M1 thru M3) and Miles Twenty-Three and Twenty-Four (M23 and M24), and additional reconfiguration or modifications occurred in 1964, with minor changes made in 1979. The remaining easterly portions (approximately 14-miles plus an 8.35-mile extension) of the Santa Clara-Ojai-Santa Barbara 66kV Transmission Line appear to date from 1956 forward with data sheets and engineering records completed and / or revised in 1956 (construction of towers at Santa Clara Substation rack), 1966 (construction of towers from Santa Clara Substation to Ojai Substation), 1969 (modifications to Santa Clara-Ojai portion), 1970 (wood pole survey), 1971 (sag and tension at conductors), 1971 (leg reconfigurations), 1978 (tower footings) 1979 (change-out of poles and addition of new poles), and 2001 (new tubular steel poles).

***B7. Moved?** ☒No ☐Yes **Date:** N/A **Original Location:** N/A

***B8. Related Features:** Southern California Edison Company Santa Clara Substation (1958), Santa Barbara Substation (1925), and Casitas Substation (1924).

B9a. Architect: Southern California Edison Company **b. Builder:** Southern California Edison Company

***B10. Significance: Theme:** None **Area:** None **Period of Significance:** None **Property Type:** Engineering System / Structure – Electric Power Conveyance System **Applicable Criteria:** NRHP and CRHR Ineligible

The Santa Clara-Ojai-Santa Barbara 66kV Transmission Line does not appear to be eligible for listing to the California Register of Historical Resources or the National Register of Historic Places. Portions of the line, from Casitas Substation to Santa Barbara Substation, were initially constructed in 1932 at a 60kV capacity approximately 20 years after SCE implemented a 60/66kV capacity system wide, and the remaining portions of the line, from Casitas Substation to Santa Clara and to Ojai Substation date from 1956 forward with known modifications occurring throughout the 1960s and 1970s including the removal of original wood poles and towers, installation of new tubular steel poles, reconfiguration at substations, and extension to the Ojai Substation that was built in 1967. No information has been identified during the course of historical research to substantiate a positive eligibility finding for the Santa Clara-Ojai-Santa Barbara 66kV Transmission Line, and therefore, the line does not meet the definition of an historical resource pursuant to Section 15064.5 of the CEQA Guidelines, nor does the line meet the definition of an historic property pursuant to Section 106 of the National Historic Preservation Act.

B11. Additional Resource Attributes: None.

***B12. References:** SCE Hummingbird Digital Archive. SCE Corporate Drawing Management Archive.

B13. Remarks: None

***B14. Evaluator:** Wendy L. Tinsley Becker, RPH, AICP, Principal, Urbana Preservation & Planning, LLC

***Date of Evaluation:** September 2012

Official Comments:

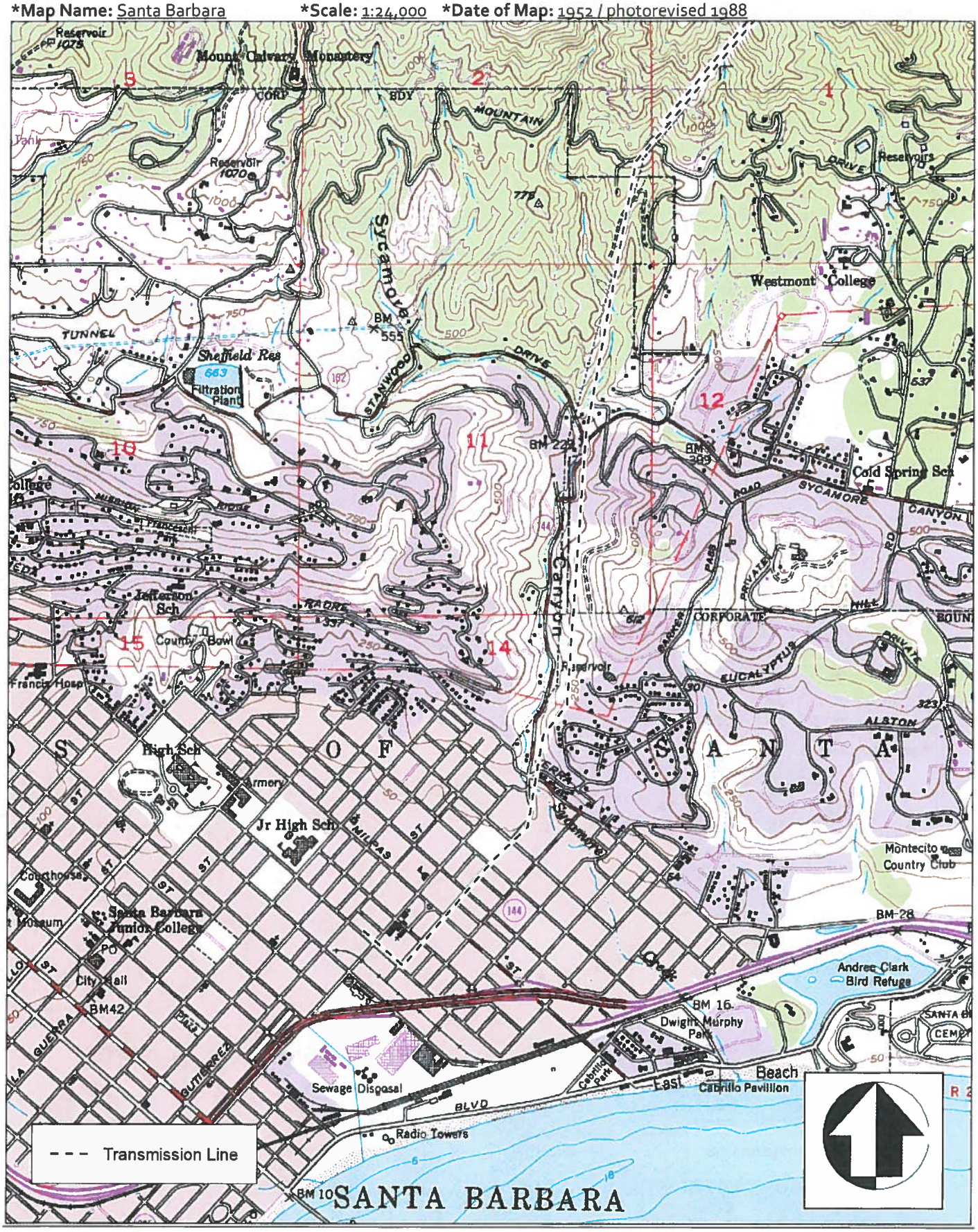
56-153060

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #: _____
HRI #: _____
Trinomial #: _____

Page 3 of 16 *Resource Name or # SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line

*Map Name: Santa Barbara *Scale: 1:24,000 *Date of Map: 1952 / photorevised 1988



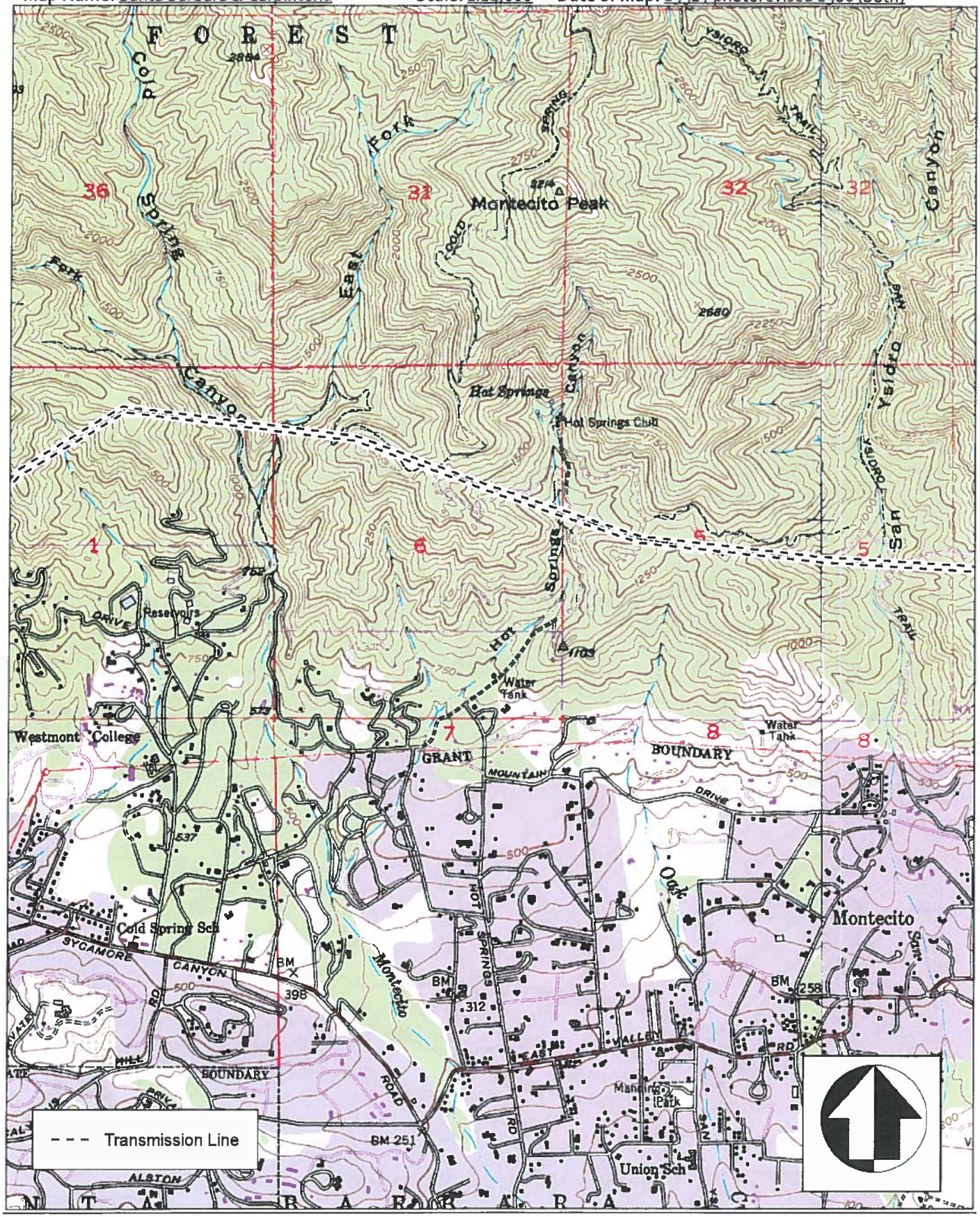
DPR 523J (1/95)

*Required information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #: _____
HRI #: _____
Trinomial #: _____

Page 4 of 16 *Resource Name or # SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line
*Map Name: Santa Barbara & Carpinteria *Scale: 1:24,000 *Date of Map: 1952 / photorevised 1988 (both)



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #: _____
HRI #: _____
Trinomial #: _____

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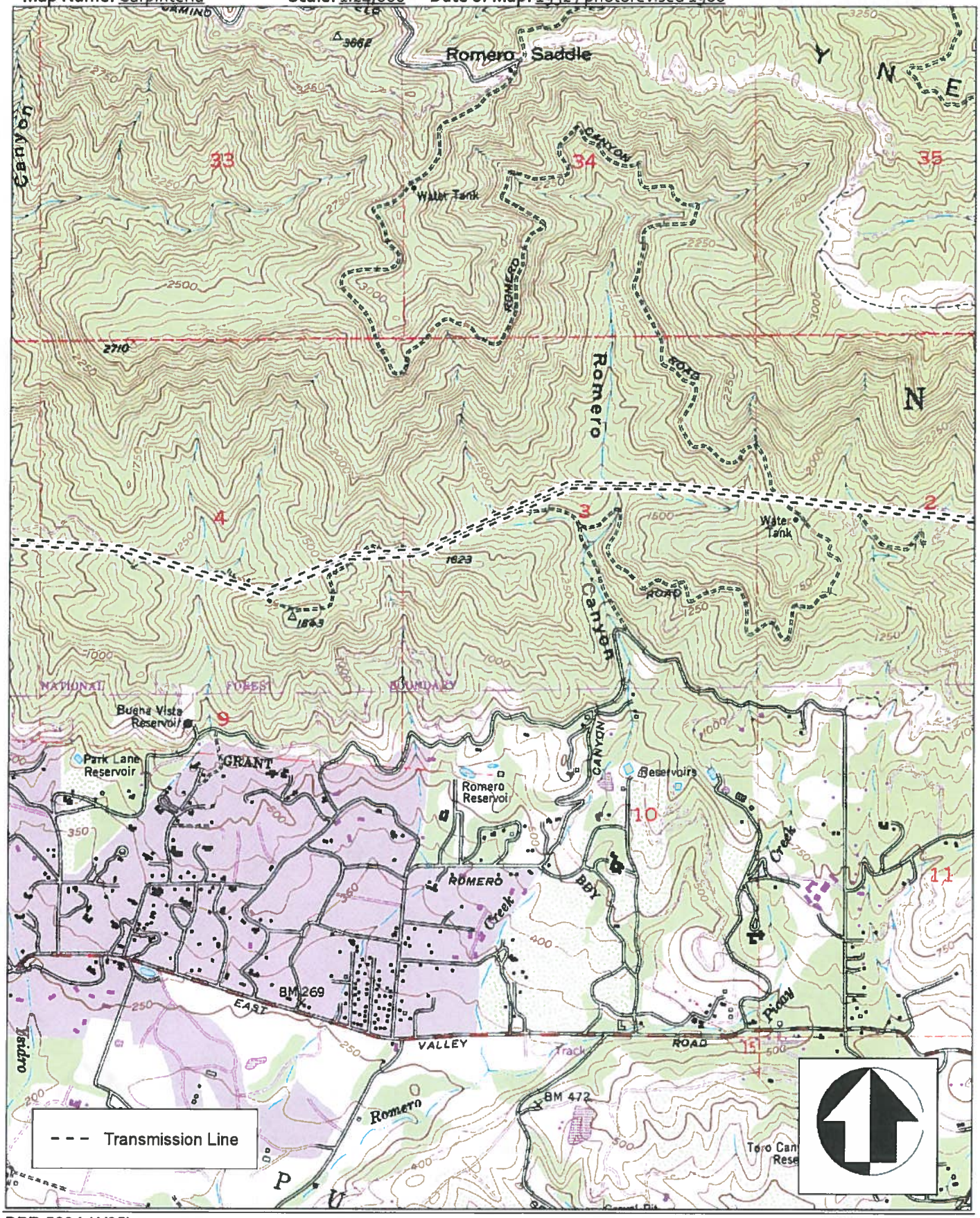
*Map Name: Carpinteria *Scale: 1:24,000 *Date of Map: 1952 / photorevised 1988

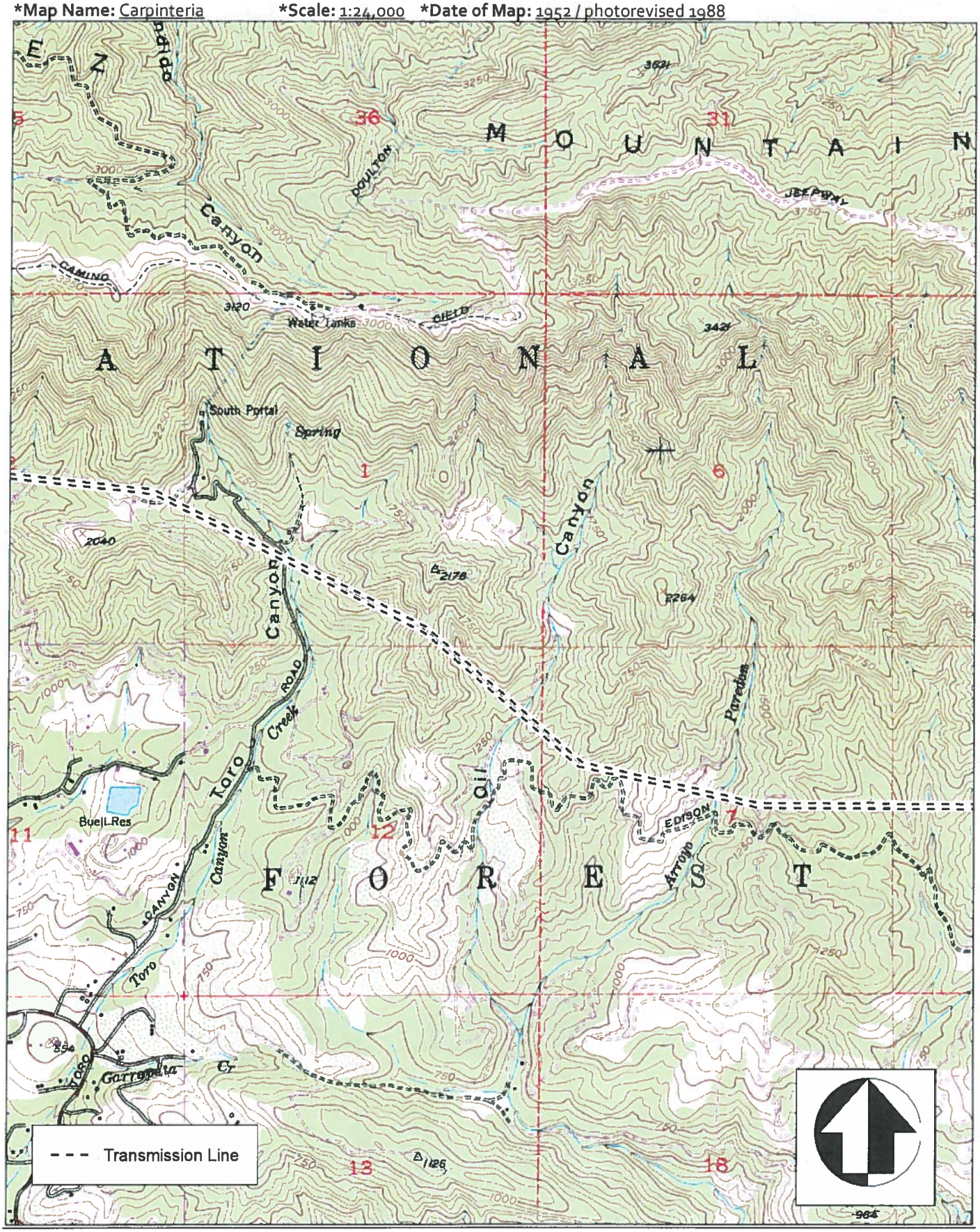


*Required information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #: _____
HRI #: _____
Trinomial #: _____

Page 6 of 16 *Resource Name or # SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line
*Map Name: Carpinteria *Scale: 1:24,000 *Date of Map: 1952 / photorevised 1988

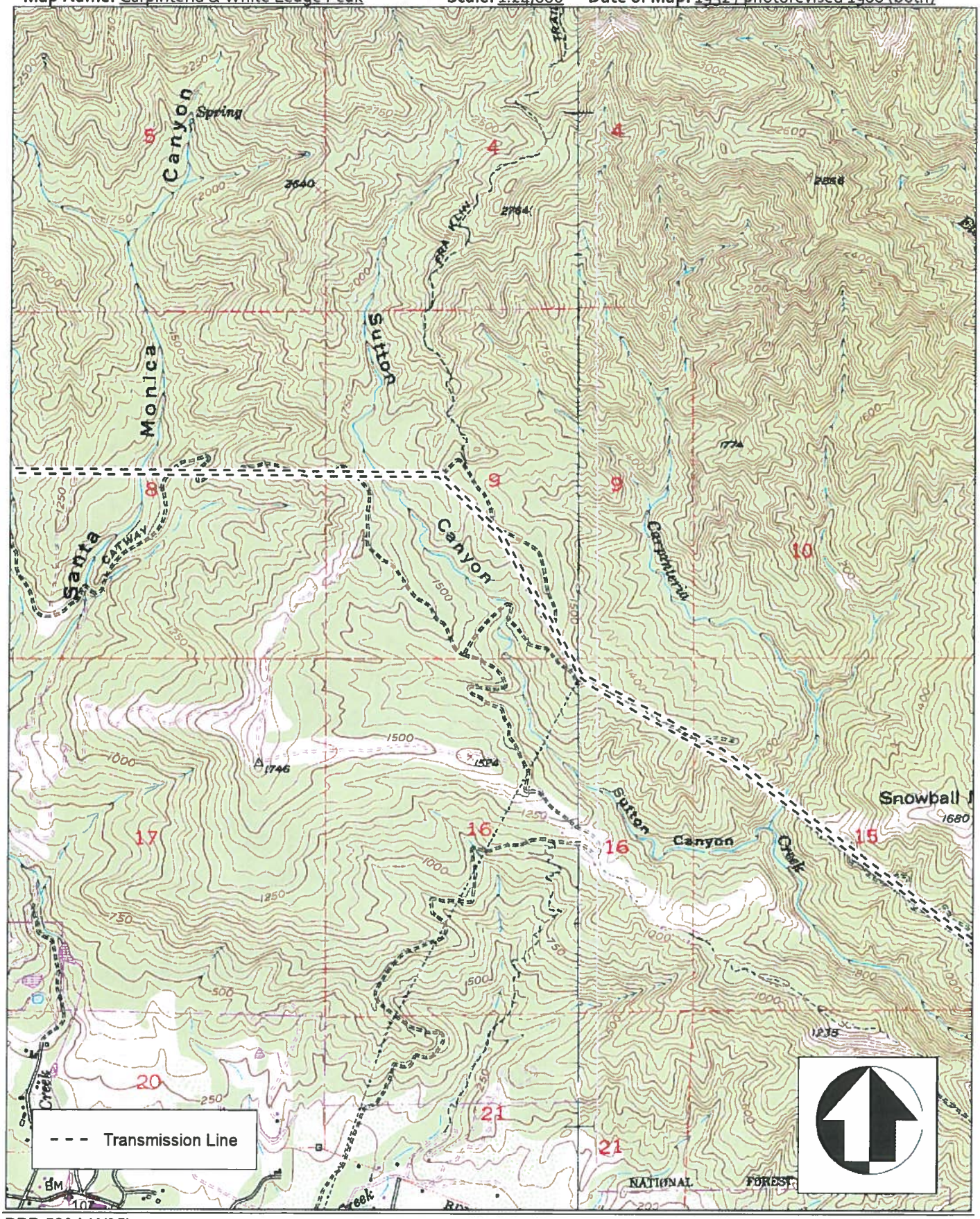


State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #: _____
HRI #: _____
Trinomial #: _____

Page 7 of 16 *Resource Name or # SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line

*Map Name: Carpinteria & White Ledge Peak *Scale: 1:24,000 *Date of Map: 1952 / photorevised 1988 (both)



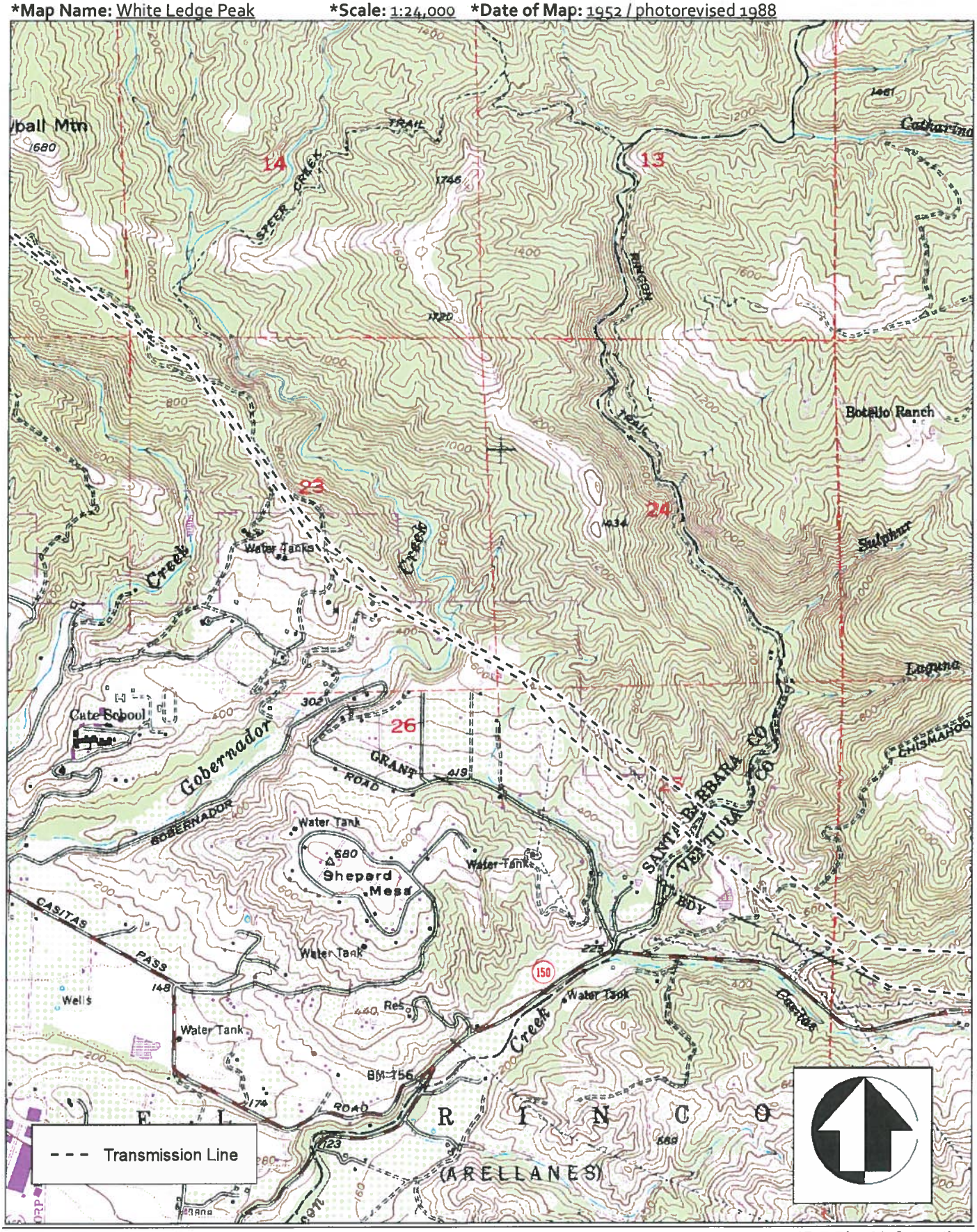
*Required information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #: _____
HRI #: _____
Trinomial #: _____

 *Resource Name or # SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line

*Map Name: White Ledge Peak *Scale: 1:24,000 *Date of Map: 1952 / photorevised 1988



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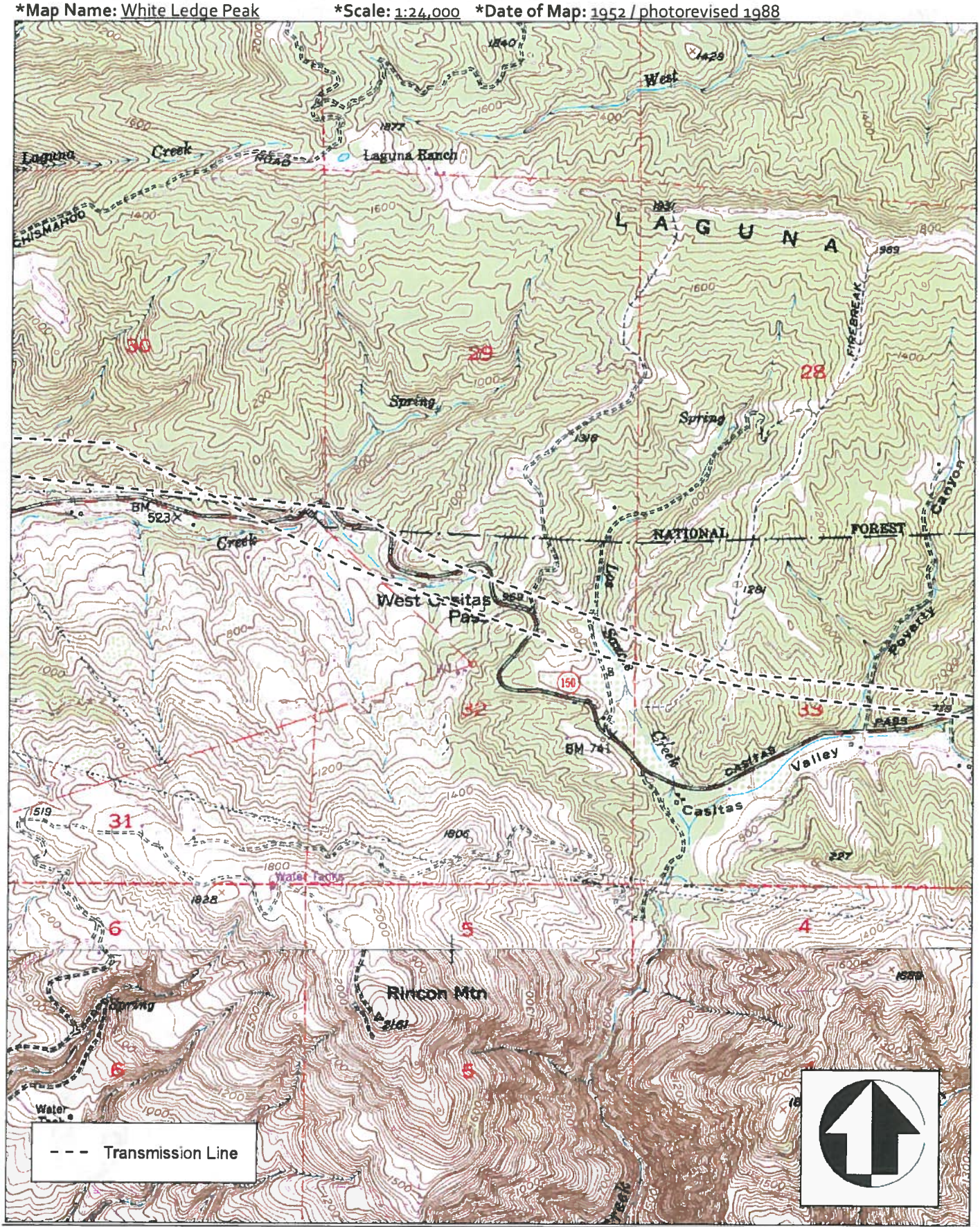
LOCATION MAP

Primary #: _____
HRI #: _____
Trinomial #: _____

 *Resource Name or # SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line

*Map Name: White Ledge Peak *Scale: 1:24,000 *Date of Map: 1952 / photorevised 1988

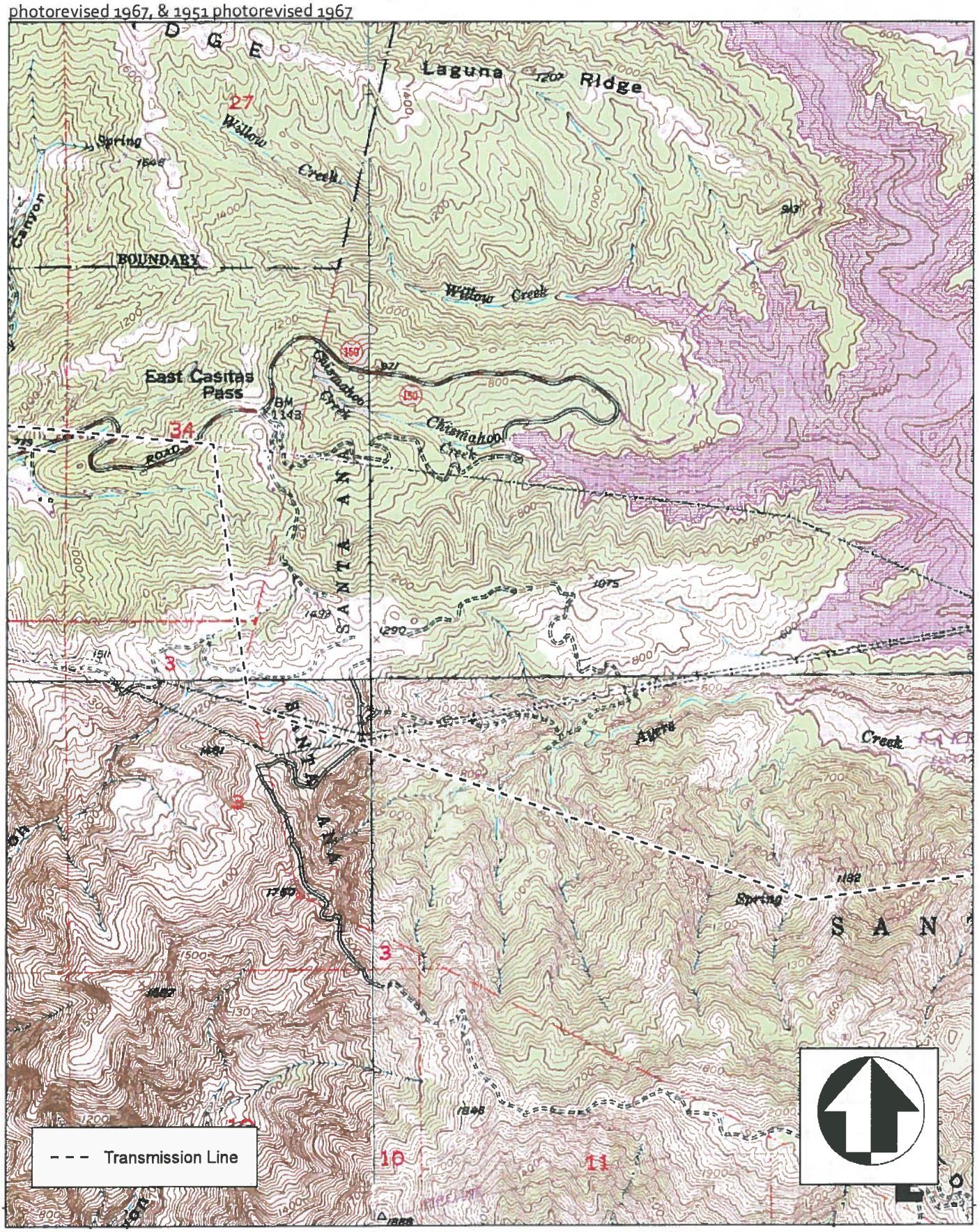


*Required information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #: _____
HRI #: _____
Trinomial #: _____

Page 10 **of** 16 ***Resource Name or #** SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line
***Map Name:** White Ledge Peak, Pitas Point, & Ventura ***Scale:** 1:24,000 ***Date of Map:** 1952 photorevised 1988, 1950 photorevised 1967, & 1951 photorevised 1967

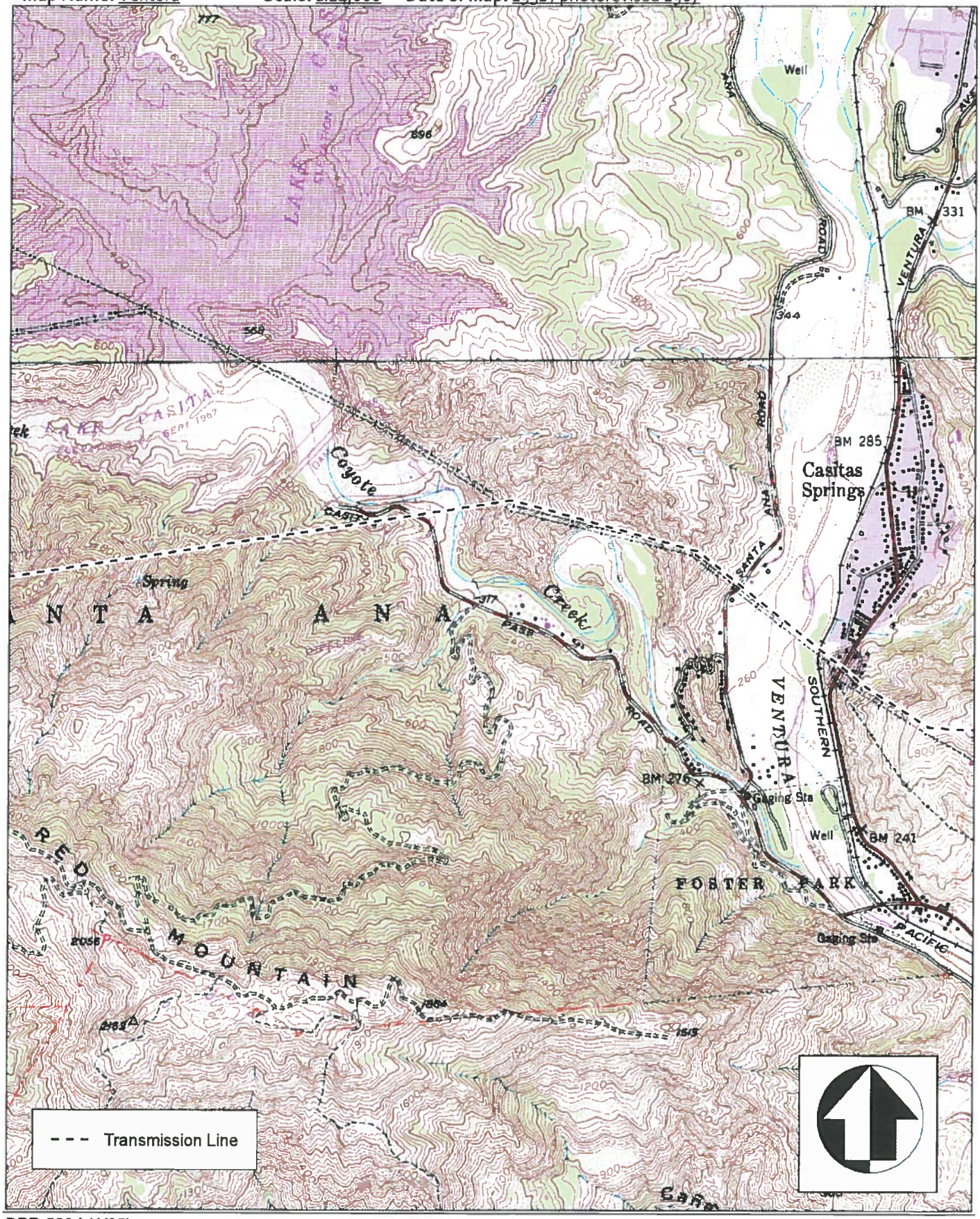


State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #: _____
HRI #: _____
Trinomial #: _____

 *Resource Name or # SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line

*Map Name: Ventura *Scale: 1:24,000 *Date of Map: 1951 / photorevised 1967



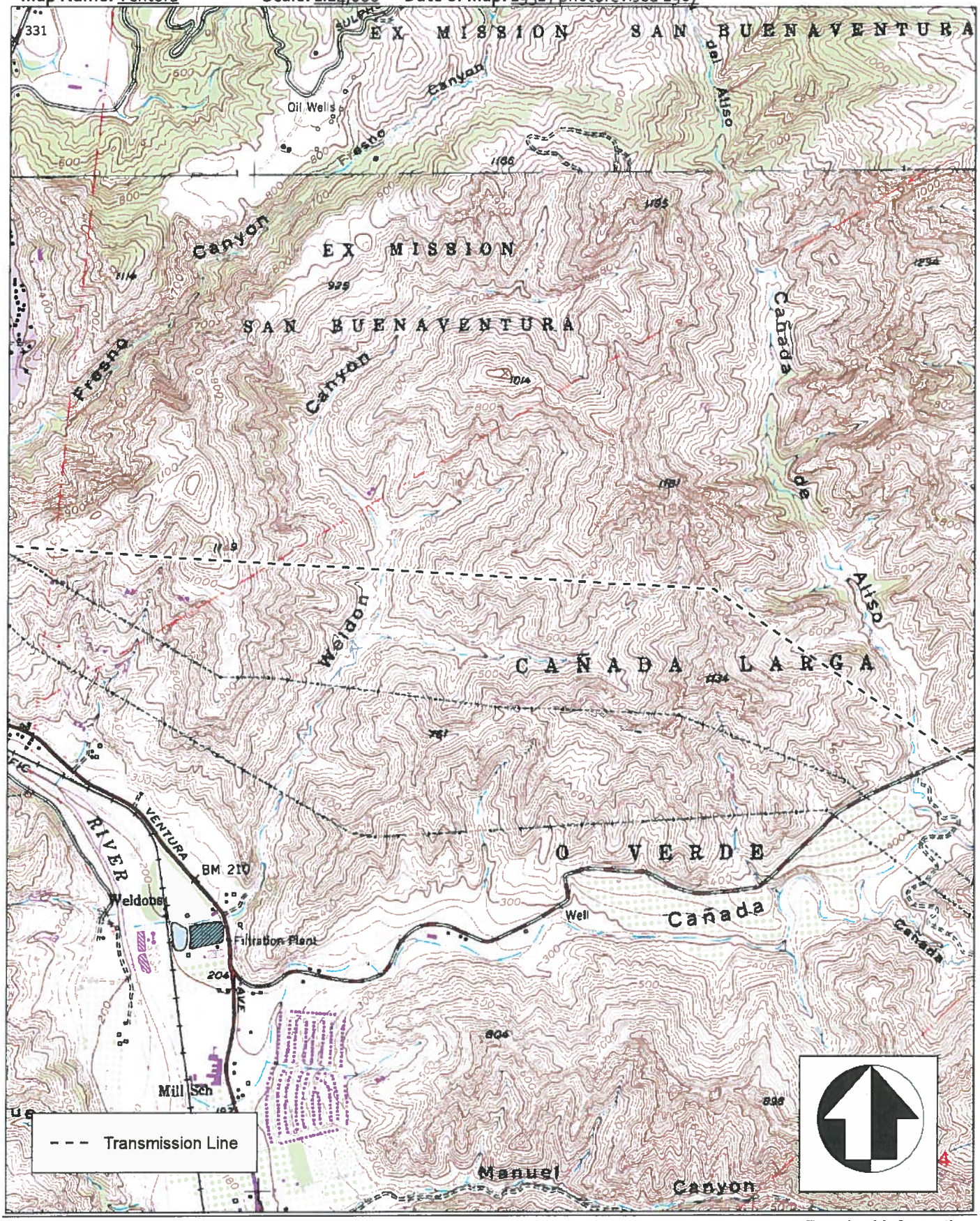
*Required information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #: _____
HRI #: _____
Trinomial #: _____

Page 12 **of** 16 ***Resource Name or #** SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line

***Map Name:** Ventura ***Scale:** 1:24,000 ***Date of Map:** 1951 / photorevised 1967



56-153060

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #: _____
HRI #: _____
Trinomial #: _____

Page 13 of 16 *Resource Name or # SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line
*Map Name: Ojai Saticoy *Scale: 1:24,000 *Date of Map: 1952 / photorevised 1988

DPR 523J (1/95)

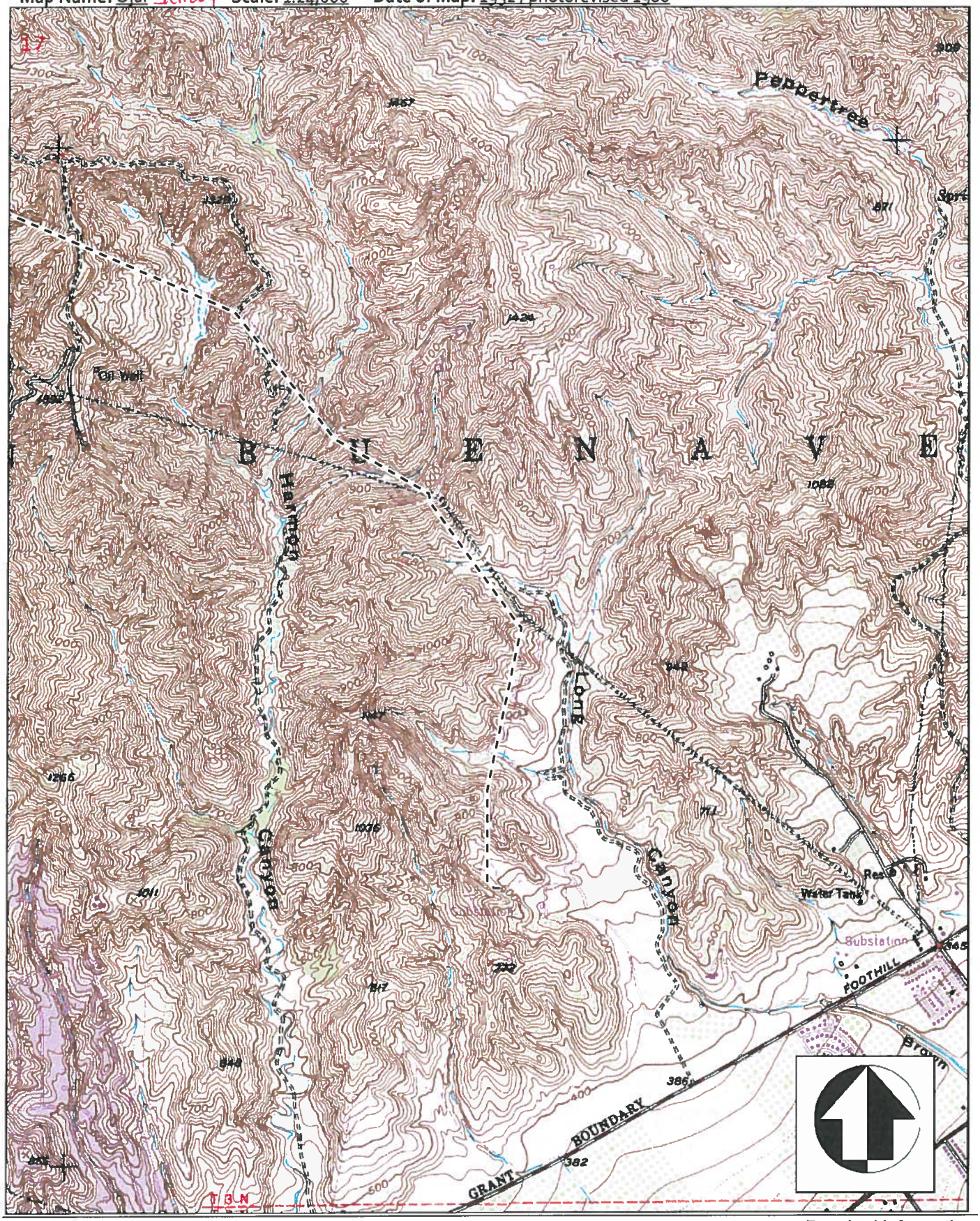
*Required information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #: _____
HRI #: _____
Trinomial #: _____

Page 14 of 16 *Resource Name or # SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line

*Map Name: ~~Ojai~~ Saticoy *Scale: 1:24,000 *Date of Map: 1952 / photorevised 1988



DPR 523J (1/95)

*Required information

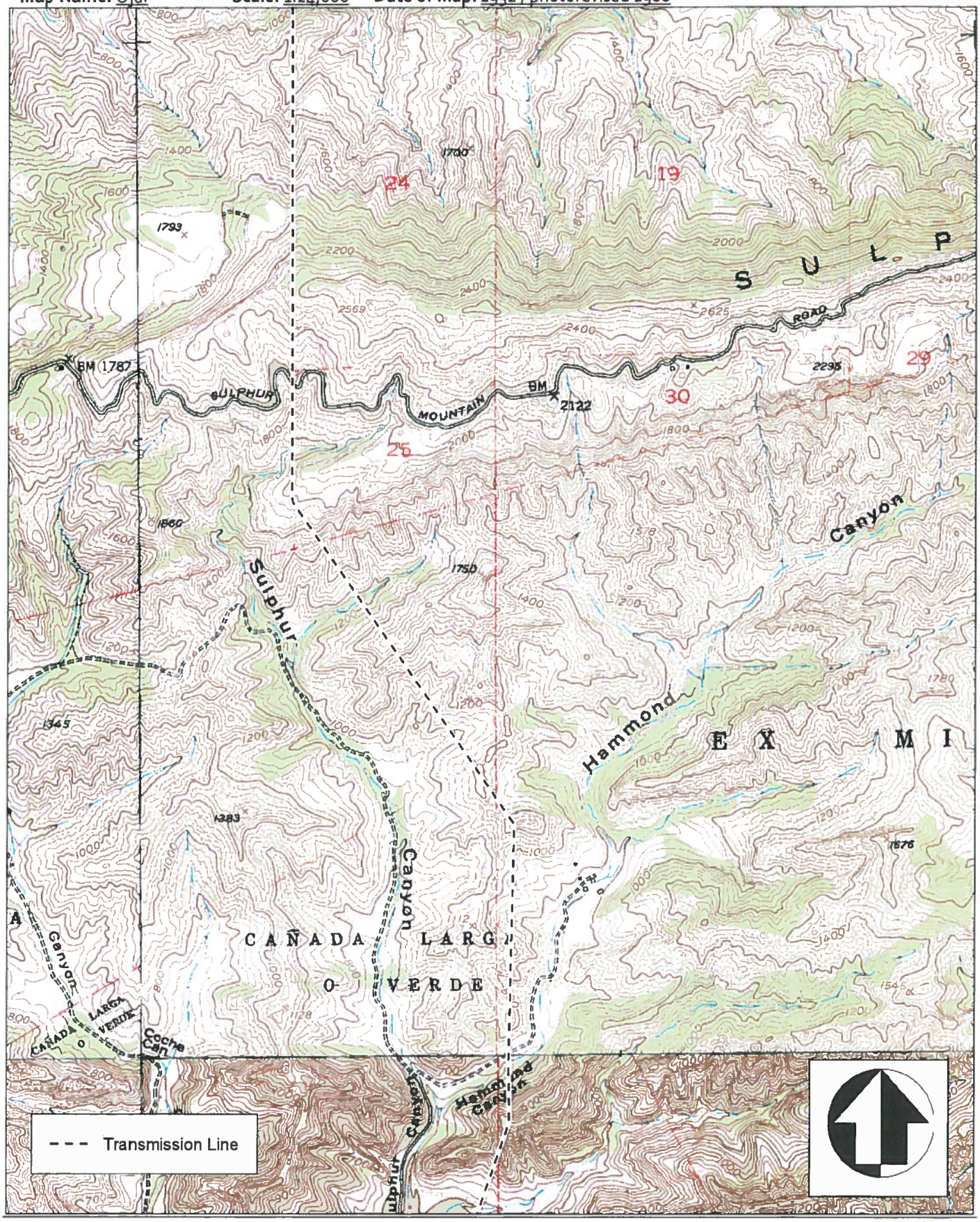
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #: _____
HRI #: _____
Trinomial #: _____

Page 15 of 16 *Resource Name or # SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line

*Map Name: Ojai *Scale: 1:24,000 *Date of Map: 1952 / photorevised 1988



56-153060

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #: _____
HRI #: _____
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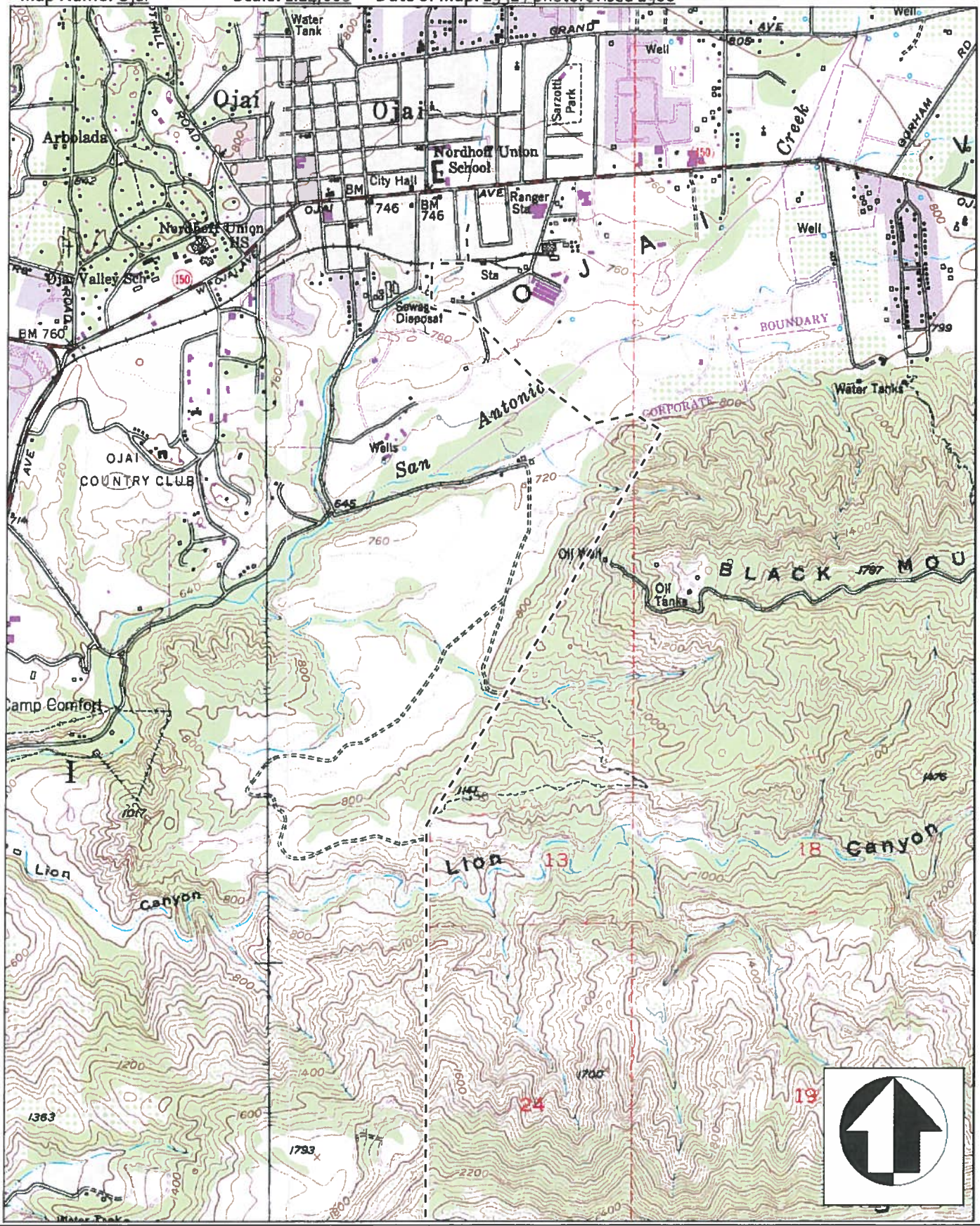
*Map Name: Ojai *Scale: 1:24,000 *Date of Map: 1952 / photorevised 1988



*Required information

Appendix D.1

Preliminary Geotechnical and Trenchless Engineering Evaluation for Rincon Creek Undercrossing

DCM Consulting, Inc.

P.O. Box 225, Lafayette, CA 94549, Telephone: 925.322.9590 www.dcmconsults.com

Technical Memorandum

To:	Mike Fisher Water Works Engineers	Date:	May 6, 2019
From:	Dave Mathy DCM Consulting, Inc.	File:	No. 309
Subject:	Preliminary Geotechnical and Trenchless Engineering Evaluation for Rincon Creek Undercrossing Santa Barbara – Venture Tie-in Pipeline Santa Barbara and Ventura Counties, California		
Reference A:	Preliminary (Desktop) Geotechnical Report Santa Barbara – Venture Tie-in Pipeline Santa Barbara and Ventura Counties, California By: Bajada Geosciences, Inc. Dates: March, 2019		

1.0 INTRODUCTION

This preliminary geotechnical and trenchless engineering memorandum has been prepared for the exclusive use of Water Works Engineers for evaluation of possible trenchless construction methods specific to a 16-inch-inside-diameter water distribution tie-in pipeline crossing of Rincon Creek at the border of Santa Barbara and Ventura Counties. The proposed pressurized water distribution tie-in pipeline will be approximately 7,500 feet long and will link Casitas Municipal Water District in Ventura County with Carpinteria Valley Water District in Santa Barbara County. The pipeline will be constructed by conventional open-cut trenching with the possible exception of a crossing beneath Rincon Creek southwest of the intersection of Rincon Road (Highway 150) and Casitas Pass Road (Highway 192).

A Preliminary (Desktop) Geotechnical Report has been prepared for the project by Bajada Geosciences, Inc. (see Reference A). The Bajada report includes reference geotechnical borings by Caltrans for two Highway 150 bridges over Rincon Creek near the proposed undercrossing location. The Caltrans reference geotechnical borings are the current basis for characterizing subsurface conditions at the Rincon Creek undercrossing location.

This technical memorandum has been prepared specifically for preliminary evaluation of possible trenchless tie-in pipeline undercrossings of Rincon Creek and does not address any other aspects of the project. All references to the project as contained in this technical memorandum have been provided by Water Works Engineers or have been taken from the Preliminary (Desktop) Geotechnical Report by Bajada Geosciences (Reference A).

2.0 UNDERCROSSING DESCRIPTION

The 16-inch-inside-diameter water distribution pipeline will cross Rincon Creek just southwest of the intersection of Rincon Road (Highway 150) and Casitas Pass Road (Highway 192). At this location, Rincon Creek represents the border between Santa Barbara County (to the west) and Ventura County (to the east). The crossing area is rural/agricultural with orchards and sparse farm homes and residences. For purposes of reference the Rincon Creek crossing is at approximately Station 58+00 in the Bajada Geosciences Preliminary (Desktop) Geotechnical report (Reference A).

In an October 15, 2002 report by Caltrans for Bridge No. 51-0316, Rincon Creek is described as: "Rincon Creek runs year round and the creek flow line is approximately at an elevation 33 meters (108 feet) at the existing bridge." (page 3, paragraph 1), (see Reference A, Appendix A). Caltrans Bridge No. 51-0316 is just downstream of the creek crossing location.

2.1. Undercrossing Location Alternatives

Water Works Engineers has identified three alternative locations for the trenchless undercrossing of Rincon Creek. These alternative undercrossing locations are within Project Segment 2 (as defined by Water Works Engineers).

- Alternative 2A: short, approximately 240 feet long, oblique crossing approximately 200 feet downstream (south) of Caltrans Bridge 51-0317 (see Figure 1).
- Alternative 2B: long, approximately 1,800 feet long, crossing from Avocado Hill Road to Casitas Pass Road just upstream (north) of Caltrans Bridge No. 51-0316 (see Figure 2).
- Alternative 2C: short, approximately 300 feet long, crossing adjacent and parallel to the west side of Caltrans Bridge No. 51-0317 (see Figure 3).

Given the pressure pipeline diameter and based on the three alternative creek undercrossing locations within project Segment 2, possible trenchless construction methods include:

- Alternative 2A and 2C, short crossings:
    - Auger bore and jack
    - Pipe ramming
    - Front steer guided boring
    - Pilot tube guided boring
    - Microtunneling
- Alternative 2B, long crossing: Horizontal Directional Drilling (HDD)

3.0 GEOTECHNICAL CONDITIONS

For purposes of preliminary trenchless construction evaluation, anticipated subsurface soil and groundwater conditions are based on reference borings by Caltrans for Bridges 51-0316 and 51-0317 as contained in Appendix A of Bajada Geosciences Preliminary (Desktop) Geotechnical Report (Reference A). Annotated copies of the Caltrans reference boring logs are attached to this technical memorandum in Appendix A, annotations relate to items of importance to trenchless construction. The subsurface soil profile at and near Rincon Creek can be characterized as:

- Younger Alluvium (referred to as overburden by Caltrans) over
- Older Alluvial Deposits and Casitas Formation.

3.1. Younger Alluvium

The Younger Alluvium is described as Holocene Age (less than 11,700 years old) poorly consolidated (i.e., loose) silt, sand and gravel deposits occupying valley floors and floodplains of modern drainages (see Reference A, Plate 3). Younger Alluvium logged by Caltrans borings along Rincon Creek is on the order of 24 feet thick at Bridge No. 51-0317 (upstream bridge) and 15 to 18 feet thick at Bridge No. 51-0316 (downstream bridge). Caltrans borings were drilled at and near bridge abutment locations, not in the middle of the creek channel, therefore the thickness of Younger Alluvium in the middle of the creek channel will likely be thicker than indicated by the Caltrans boring logs. The range of physical and engineering properties of alluvium pertinent to trenchless construction are:

- Composition: silty sand, silty sand with gravel, poorly graded sand, clayey sand, cobbles and boulders (typical of creek channel deposits).
- Consistency: Standard Penetration Test Blow Count, N-values = 7 to >100, loose to very dense (range reflects high blow counts on cobbles and boulders).
- Cobbles and Boulders: described as hard, subrounded sandstone, appear nested (i.e., not evenly distributed), see Caltrans boring B2-02 for bridge 51-0316.
- Permeability: very high (through gravel, cobbles and boulders).
- Abrasivity: high (see hard sandstone cobbles and boulders).
- Tunnelman's Ground Classification (see Figure 4): raveling to flowing.

3.2. Older Alluvial Deposits and Casitas Formation

The Younger Alluvium near and along Rincon Creek is underlain by Older Alluvial Deposits and Casitas Formation. Both the Older Alluvial Deposits and Casitas Formation are described as Pleistocene Age (i.e.,

11,700 to 2.6 million years old) nonmarine moderately to well-consolidated (i.e., dense) siltstone and silt, multi-colored sandstone and sand and conglomerate and gravel deposited mainly as alluvium likely shed off of the Santa Ynez Mountains and other nearby uplands (see Reference A, Plate 3). The range of physical and engineering properties of the Casitas Formation as encountered in Caltrans' bridge borings pertinent to trenchless construction are:

- Composition: lean clay, clayey sand, poorly graded sand, sandy lean clay, silty sand, silt.
- Consistency: Standard Penetration Test Blow Count, N-values are consistently >70, very dense (sands) and hard (clays).
- Permeability: varies widely from slow to high, see loss of drilling mud circulation at 25 feet deep in Caltrans boring B2-02 for Bridge 51-0316.
- Cementation: erratic cementation noted in interlayered strata (variable shear strength)
- Plasticity: low to moderate in clays.
- Abrasivity: low to moderate.
- Tunnelman's Ground Classification (see Figure 4): firm.

3.3. Groundwater

Groundwater was encountered within the Caltrans reference borings at about Elevation 108 to 111 at Bridge No. 51-0316 (downstream bridge) and about Elevation 139 at Bridge No. 51-0317 (upstream bridge).

These groundwater elevations roughly correspond to the creek water levels at the time of drilling, June 2002 for Bridge No. 51-0316 and January 1988 for Bridge No. 51-0317. As illustrated in the reference Caltrans boring logs, groundwater is carried within the Younger Alluvium on top of the Casitas Formation.

4.0 TRENCHLESS CONSTRUCTION EVALUATION

The following trenchless construction evaluation is presented in two parts:

- Short crossings, Alternatives 2A and 2C
- Long crossing, Alternative 2B

4.1. Alternatives 2A and 2C, Short Crossings

Alternatives 2A and 2C are both short undercrossings of Rincon Creek with lengths of about 240 feet to 300 feet. For a 16-inch-inside-diameter pressurized product pipe with installation lengths less than 300 feet and surface space constraints the trenchless alternatives include:

- auger bore and jack;
- pipe ramming;
- front steer guided boring;
- pilot tube guided boring; and
- microtunneling.

The 16-inch water distribution pipeline would typically be placed within a steel casing (e.g., 36-inch-diameter steel casing) installed from jacking (entry) shaft to receiving (exit) shaft by one of the above methods. All of these methods are highly sensitive to cobbles and boulders, even at low concentrations of 5% to 10% of tunnel volume. Nested, high concentration, cobbles and boulders (see Caltrans boring B2-02) represent a high risk and likely fatal flaw to all of the above trenchless methods with the exception of pipe ramming. In order to avoid the cobbles and boulders in the Younger Alluvium, the trenchless tunnel zone must be lowered to be within the Casitas Formation and safely below the Younger Alluvium in the middle of the creek channel. This depth will likely also be required to get below the potential creek bed scour depth.

4.1.1. Alternative 2A and 2C Risks

The principal risks for alternatives 2A and 2C are:

- control of groundwater, and
- shaft construction.

Groundwater control in the highly porous Younger Alluvium will be extremely difficult requiring "watertight" shafts. Given the presence of cobbles and boulders within the younger alluvium typical interlocking sheet pile shafts will not be feasible (hard cobbles and boulders tend to cause deflection and misalignment of sheet piles resulting in split sheet pile seams and groundwater leaks). Either slurry wall or secant pile shafts are possible but still risky in the cobble and boulder rich Younger Alluvium. Even with "watertight" shafts and the pipeline tunnel zone lowered to the Casitas Formation, groundwater control will still be an issue especially within Casitas Formations more granular, clean sand strata (see Caltrans boring B2-02 for lost drilling mud circulation and poorly graded sand, SP, strata within both B2-01 and B2-02 at Bridge No. 51-0316). Groundwater within porous strata within the Casitas Formation will require portal pretreatment at both the launch and receiving shafts (e.g., jet grouting to form impermeable soilcrete prisms outside the shaft portals) and will require a tunneling method capable of working below groundwater (e.g., microtunneling). The combination of high cobble and boulder concentrations in the

Younger Alluvium, porous strata within the Casitas Formation and high groundwater with year-long creek flows makes all trenchless alternatives, except microtunneling, very high risk. Even microtunnel installation of a 36-inch steel casing with "watertight" shafts and "watertight" launch and reception portals will be risky and will be extraordinarily expensive. In order to confirm microtunneling feasibility and define project risks and costs, a design level geotechnical investigation will be required. Subsurface investigation will be required on each side of the creek (at shaft locations) including conventional test borings, oversize borings or test pits, groundwater monitoring wells, groundwater pump tests, laboratory testing (e.g. Younger Alluvium particle size distribution, permeability, shear strength, cobble and boulder unconfined compressive strength and Older Alluvial Deposits and Casitas Formation particle size distribution, plasticity, permeability, unconfined compressive strength, abrasivity).

4.1.2. Alternative 2A and 2C Options

The cost and risks of a trenchless undercrossing for Alternatives 2A and 2C are disproportionate to the installation length of the 16-inch water distribution pipeline. Both project risks and costs can be substantially reduced by either:

- placing the 16-inch water distribution pipeline on one of the Caltrans bridges, or
- constructing an independent pipe bridge across Rincon Creek.

4.2. Alternative 2B, Long Crossing

Alternative 2B is a long, approximately 1,800 feet, alignment of the 16-inch water distribution pipeline from Avocado Hill Road to Casitas Pass Road. At Avocado Hill Road (east end of the pipeline alignment and east side of Rincon Creek) the ground surface elevation is at approximately El. 130. The ground surface rises up on the west side of Rincon Creek to about El. 230 and drops down to Casitas Pass Road (west end of the pipeline alignment) to about El. 185. Given the alignment topography the HDD bore path would be drilled from east to west with the bore path maintained within the Casitas Formation and Older Alluvial Deposits which represent good conditions for HDD. For any portion of the HDD bore path within the Younger Alluvium (e.g. upper 20 feet or so), conductor casings will be required. Given the difference in elevation between the HDD entry point (east end) and higher exit point (west end) of about 55 feet, a special conductor casing will be required on the entry side with a gate valve and rubber entry seal to keep the bore hole filled with drilling fluids and maintain drilling fluids circulation.

4.2.1. Alternative 2B Risks

The principal risks for Alternative 2B are:

- HDD drilling fluids hydrofracture or inadvertent returns to the ground surface along Avocado Hill Road and Casitas Pass Road;
- Loss of drilling fluid circulation in porous strata within the Casitas Formation and Older Alluvial Deposits (see Caltrans boring B2-02 at 25 feet deep);
- Transitioning in and out of possible fault gouge of the Rincon Creek Fault (see Reference A, Plate 3); and

- Getting beneath landslide deposits on the downslope side of Casitas Pass Road (see Reference A, Plate 3).

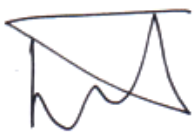
In order to confirm HDD feasibility and define project risks and costs a design level geotechnical investigation will be required including four to six test borings to maximum depths of 150 feet, groundwater monitoring wells, laboratory testing (e.g. Younger Alluvium particle size distribution, permeability, shear strength, cobble and boulder unconfined compressive strength and Older Alluvial Deposits and Casitas Formation particle size distribution, plasticity, permeability, unconfined compressive strength, abrasivity), fault mapping studies and landslide mapping studies.

5.0 PRELIMINARY CONCLUSIONS

Based on the present level of project definition, presently known site constraints and presently known geotechnical conditions, hanging the 16-inch water distribution tie-in pipeline on one of the existing Caltrans bridges or building a new independent pipe bridge (Alternative 2A or 2C short crossings) represent the least risk and likely least cost alternative. If neither of these two options are possible then the next best alternative (i.e. the next best trenchless alternative with the best chance of success) is Alternative 2B, the 1,800-foot-long HDD installation. The overall feasibility and cost of Alternative 2B, 1,800-foot-long HDD, is highly contingent on completing the design level geotechnical investigation outlined above.

6.0 LIMITATIONS

This technical memorandum has been prepared for the exclusive use of Water Works Engineers for preliminary evaluation of trenchless undercrossings for the Santa Barbara – Ventura Water Distribution Tie-in Pipeline project as described herein. This technical memorandum may not be used for any other purpose or for any other project. This technical memorandum should only be read in conjunction with the March 2019 Preliminary (Desktop) Geotechnical Report for the project prepared by Bajada Geosciences (Reference A). The preliminary conclusions and recommendations of this technical memorandum will be confirmed, refined and updated based on the results of site and crossing specific design level geotechnical investigations (i.e. subsurface test borings, laboratory testing, etc.). Within the present limitations of scope, schedule and budget, DCM Consulting, Inc.'s services have been provided in substantial accordance with generally accepted practices in the field of geotechnical and trenchless engineering in California at the time this technical memorandum was completed. The preliminary conclusions and recommendations presented herein are based on the author's professional knowledge, judgment and experience. No warranty or other conditions, express or implied, is made or intended in connection with the professional engineering services provided for this project.



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David C. Mathy, CE 28082, GE 569

Figure 1 – Trenchless Undercrossing Option 2A. Length approx. 240 feet. Requires deep shafts (approx. 30 to 40 ft. deep) to get below Younger Alluvium cobbles and boulders in the middle of the creek channel and safely into the underlying Casitas Formation.

Figure 2 – Trenchless Undercrossing Option 2B. Length approx. 1,800 feet. Requires specialized conductor casing (gate valve and rubber entry seal) on downhill (HDD entry) side to safely contain HDD drilling fluids. HDD bore path to be well within Older Alluvial Deposits and Casitas Formation.

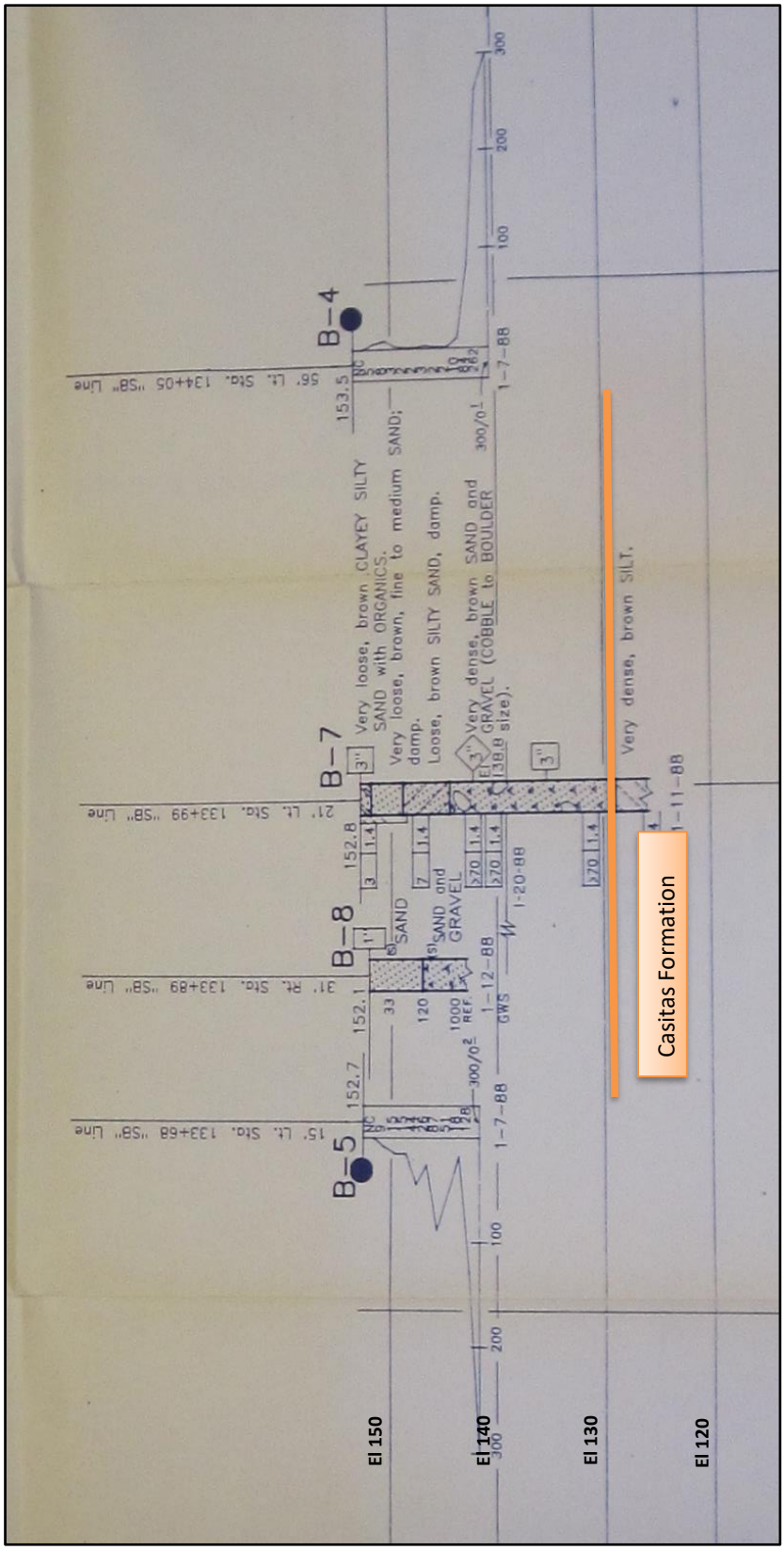
Figure 3 – Trenchless Undercrossing Option 2C. Length approx. 300 feet. Requires deep shafts (approx. 30 to 40 ft. deep) to get below Younger Alluvium cobbles and boulders in the middle of the creek channel and safely into the underlying Casitas Formation.

Classification		Behavior	Typical Soil Types
FIRM		Heading can be advanced without initial support and final lining can be constructed before ground starts to move	Loess above water table; hard clay marl, cemented sand and gravel when not highly overstressed.
RAVELING	**Slow Raveling**	Chunks or flakes of material begin to drop out of the arch or walls sometime after the ground has been exposed due to loosening or to overstress and "brittle" fracture (ground separates or breaks along distinct surfaces, opposed to squeezing ground). In fast raveling ground, the process starts within a few minutes; otherwise the ground is slow raveling.	Residual soils or sand with small amounts of binder may be fast raveling below the water table, slow raveling above. Stiff fissured clays may be slow or fast raveling depending upon degree of overstress.
	Fast Raveling		
SQUEEZING		Ground squeezes or extrudes plastically into tunnel, without visible fracturing or loss of continuity, and without perceptible increase in water content. Ductile, plastic yield and flow due to overstress.	Ground with low frictional strength. Rate of squeeze depends on degree of overstress. Occurs at shallow to medium depth in clay of very soft to medium consistency. Stiff to hard clay under high cover may move in combination of raveling at excavation surface and squeezing at depth behind surface.
RUNNING	**Cohesive, running**	Granular materials without cohesion are unstable at a slope greater than their angle of repose (±30-35°). When exposed at steeper slopes, they run like granulated sugar or dune sand until the slope flattens to the angle of repose.	Clean, dry granular materials. Apparent cohesion in moist sand or weak cementation in any granular soil may allow the material to stand for brief period of raveling before it breaks down and runs. Such behavior is cohesive-running.
	Running		
FLOWING		A mixture of soil and water flows into the tunnel like a viscous fluid. The material can enter the tunnel from the invert as well as from the face, crown, and walls, and can flow for great distances, completely filling the tunnel in some cases.	Below the water table in silt, sand, or gravel without enough clay content to give significant cohesion and plasticity. May also occur in highly sensitive clay when such material is disturbed.
SWELLING		Ground absorbs water, increases in volume, and expands slowly into the tunnel.	Highly preconsolidated clay with plasticity index in excess of about 30, generally containing significant percentages of montmorillonite.
REFERENCE:		Heuer, R. E., 1974, Important ground parameters in soft ground tunneling, Subsurface exploration for underground excavation and heavy construction, New England College, Henniker, New Hampshire, American Society of Civil Engineers, New York, P. 41-55.	

Figure 4 - Tunnelmans Ground Classification System

Appendix A

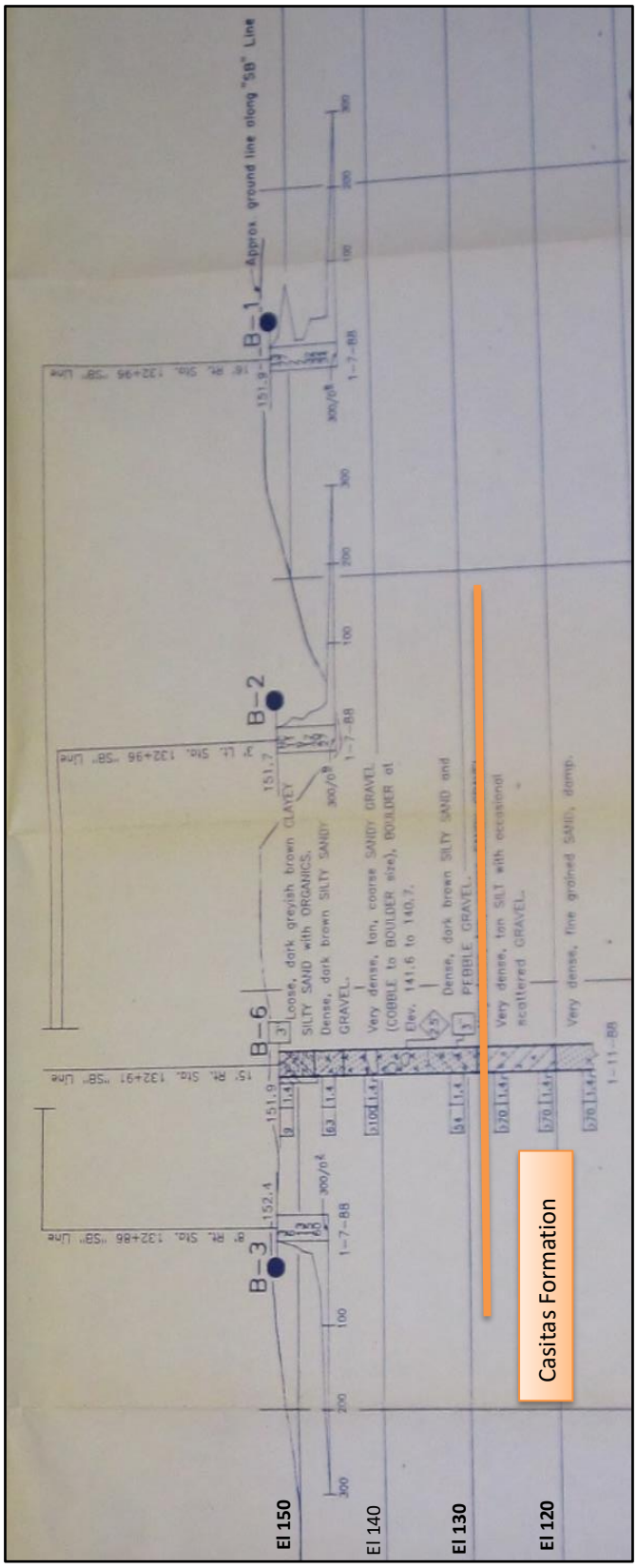
Annotated Caltrans bridge boring logs



Caltrans Bridge No. 51-0317
Borings drilled on 1/11/88

Gravel, cobbles and boulders to El. 128

Groundwater at El. 139



Caltrans Bridge 51-0317 (upstream bridge)
Borings drilled on 1/11/88

Gravel and Cobbles to El. 128

Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B1-02	Location: 2.55 m Right of CL Align "REV" : Station 101+42.3	E.A. 05-282801
Dist.-County-Rt.-PM 05-SB-150-1.0/R1.6 -(KP) 1.6/R2.6	Project Description: Rincon Creek Bridges 51-0316, downstream	Page 1 of 6
Date Started: 6-25-02 Completed: 6-26-02	Drill Rig: B-47 Trailer Mounted , #4787	Depth to Water / Date
Surface Elevation: 37.33 122.4 ft	Drill Method/Hammer Type: Mud Rotary/63.5 KN Safety Hammer	: 3.53 m 11.6 ft : 7-9-02
Total Depth (ft.) 90.0	Drillers: Bob Gingell, Bob Enelx, Baird McKnight	: 3.57 m 11.7 ft : 7-28-02
(meters) 27.43	Logged By: Sara von Schwind/ Dan Appelbaum	: :

Depth	Sampler/Bit	Sampler: Sample Number	Sampler: Recovery/Length %	Sampler: Blows per 150mm	Sampler: N (SPT)	Sampler: Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Test Results: Wet Unit Weight (KN/cubic meter)	Test Results: Water Content (%)	Test Results: Liquid Limit (%)	Test Results: Plastic Limit (%)	Elevation (m)
ft m 0 0										Ground Surface					37.33
1	94mm									**Silty Sand** loose, brown, dry, fine grained, with sandstone cobbles					37
2										cobbles					
3 1										**Silty Sand with gravel** medium dense, brown, moist, angular, fine to medium sand, angular and rounded fine to coarse gravel					
4															36
5															
6	SPT	1	72%	6,7,7	14					cobble					
7 2								SM							35
8	94	2								Cobble					
9															
10 3										No gravels with layers of sandy silt, soft, brown, with black organics					
11	SPT	3	78%	2,2,10	12					Groundwater at El 110.7 on 6/26/02					34
12															
13 4	94	4	37%							With coarse gravel up to 65 mm diameter, rounded					
14															33
15															

Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B1-02

Location: 2.55 m Right of CL Align. "REV" : Station 101+42.3

E.A. 05-282801

Dist.-County-Rt.-PM 05-SB-150-1.0/R1.6 -(KP) 1.6/R2.6

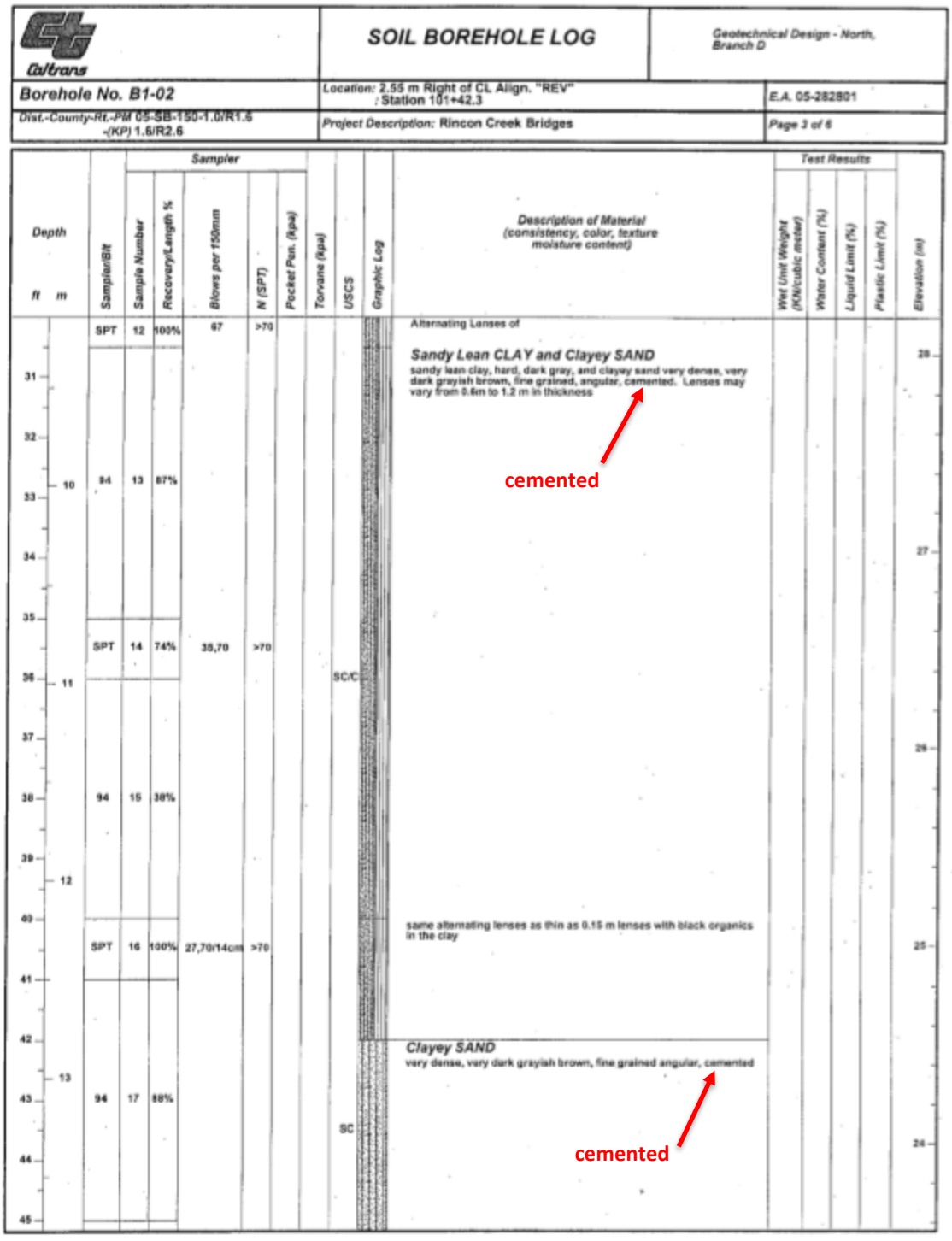
Project Description: Rincon Creek Bridges

Page 2 of 6

Depth ft	Depth m	Sampler/Bit	Sample Number	Recovery/Length %	Blows per 150mm	N (SPT)	Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Test Results: Wet Unit Weight (KN/cubic meter)	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Elevation (m)
16	5	SPT	5	59%	9,14,23	37					**Lean Clay** hard, strong brown with gray streaks, moist, highly plastic, with structure (Casitas Formation)					
17							431				strong brown					
18		94	6	98%							[Casing Depth]					32
19																
20	6															
21		SPT	7	46%	11,13,21	34			CL							31
22																
23	7	94	8	21%			311									
24																30
25											very dark grayish brown, with thin lenses of silty SAND, very dark grayish brown					
26	8	SPT	9		21,30,48	>70	>431				Graded into					
27		94	10	66%					SC		**Clayey SAND** very dense, very dark grayish brown, fine, angular					29
28											[Drilling mud surfacing in area of drilling. A total of 18 feet of casing was driven to stop circulation loses.]					
29	9	94	11	100%												
30																

Top of Casitas Formation at El. 107.4

Lost drilling mud circulation implies high permeability formation clean sands



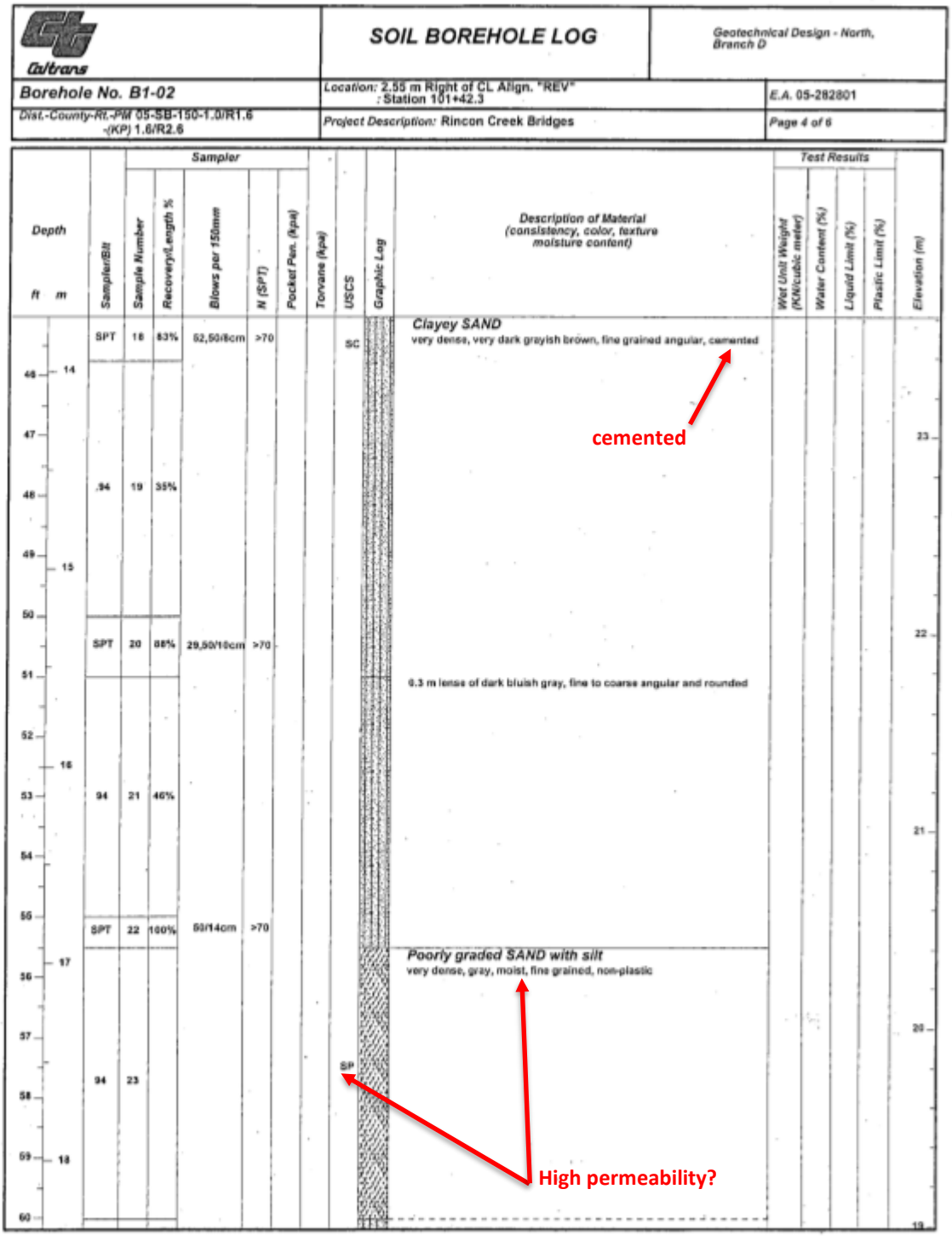
Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B1-02	Location: 2.55 m Right of CL Align. "REV" ; Station 101+42.3	E.A. 05-282801
Dist.-County-Rt.-PM 05-SB-150-1.0/R1.6 -(KP) 1.6/R2.6	Project Description: Rincon Creek Bridges	Page 3 of 6

Depth ft	Depth m	Sampler: Sample/Bit	Sampler: Sample Number	Sampler: Recovery/Length %	Sampler: Blows per 150mm	Sampler: N (SPT)	Sampler: Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Test Results: Wet Unit Weight (KN/cubic meter)	Test Results: Water Content (%)	Test Results: Liquid Limit (%)	Test Results: Plastic Limit (%)	Elevation (m)
31		SPT	12	100%	67	>70					Alternating Lenses of **Sandy Lean CLAY and Clayey SAND** sandy lean clay, hard, dark gray, and clayey sand very dense, very dark grayish brown, fine grained, angular, cemented. Lenses may vary from 0.6m to 1.2 m in thickness					28
32																
33	10	94	13	87%							cemented					
34																27
35		SPT	14	74%	35,70	>70										
36	11								SC/C							
37																26
38		94	15	38%												
39																
40	12	SPT	16	100%	27,70/14cm	>70					same alternating lenses as thin as 0.15 m lenses with black organics in the clay					25
41																
42											**Clayey SAND** very dense, very dark grayish brown, fine grained angular, cemented					
43	13	94	17	88%					SC		cemented					
44																24
45																


Caltrans
SOIL BOREHOLE LOG
Geotechnical Design - North, Branch D
Borehole No. B1-02
Location: 2.55 m Right of CL Align. "REV" : Station 101+42.3
E.A. 05-282801
Dist.-County-Rt.-PM 05-SB-150-1.0/R1.6
-(KP) 1.6/R2.6
Project Description: Rincon Creek Bridges
Page 4 of 6
Sampler
Test Results
Depth ft m
Sampler/Bit
Sample Number
Recovery/Length %
Blows per 150mm
N (SPT)
Pocket Pen. (kpa)
Torvane (kpa)
USCS
Graphic Log
Description of Material (consistency, color, texture moisture content)
Wet Unit Weight (KN/cubic meter)
Water Content (%)
Liquid Limit (%)
Plastic Limit (%)
Elevation (m)
SPT 18 83% 52,50/8cm >70 SC
Clayey SAND
very dense, very dark grayish brown, fine grained angular, cemented
cemented
94 19 35%
SPT 20 88% 29,50/10cm >70
0.3 m lense of dark bluish gray, fine to coarse angular and rounded
94 21 46%
SPT 22 100% 50/14cm >70
Poorly graded SAND with silt
very dense, gray, moist, fine grained, non-plastic
SP
94 23
High permeability?

Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B1-02

Location: 2.55 m Right of CL Align. "REV" : Station 101+42.3

E.A. 05-282801

Dist.-County-Rt.-PM 05-SB-150-1.0/R1.6 -(KP) 1.6/R2.6

Project Description: Rincon Creek Bridges

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Depth ft	Depth m	Sampler/Bit	Sampler: Sample Number	Sampler: Recovery/Length %	Sampler: Blows per 150mm	Sampler: N (SPT)	Sampler: Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Test Results: Wet Unit Weight (kN/cubic meter)	Test Results: Water Content (%)	Test Results: Liquid Limit (%)	Test Results: Plastic Limit (%)	Elevation (m)
61		SPT	24	87%	6,10,>50	>70	>431				**Sandy Lean CLAY** hard, brownish gray, slightly moist, low plasticity, sand fraction is very fine grained					
62	19															
63		94	25	19%					CL		**Lean CLAY with Sand** hard, brown with gray lenses of fine sand, slightly moist, moderate plasticity					18
64																
65		SPT	26	100%	60/15cm	>70					Alternating Layers of **Sandy CLAY and Clayey SAND** hard, grayish brown, slightly moist, low to moderate plasticity, sands are very fine grained					
66	20															
67									SC/CL							17
68		94	27	11%												
69	21															
70		SPT	28	100%	35,75/6cm	>70					**Sandy Lean CLAY** hard, brown, slightly moist, low plasticity very fine sands					16
71																
72	22															
73		94	29	100%					CL							15
74																
75																

Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B1-02

Location: 2.55 m Right of CL Align. "REV" : Station 101+42.3

E.A. 05-282901

Dist.-County-Rt.-PM 05-SB-150-1.0/R1.6 -(KP) 1.6/R2.6

Project Description: Rincon Creek Bridges

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Depth ft	Depth m	Sampler/Bit	Sample Number	Recovery/Length %	Blows per 150mm	N (SPT)	Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Wet Unit Weight (KN/cubic meter)	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Elevation (m)
76	23										**Sandy Lean CLAY** hard, brown, slightly moist, low plasticity very fine sands					
77																14
78		94	30	96%												
79	24										*End of Borehole = 90 feet Installed 80 ft of 1.5 inch slotted PVC capped with 10 ft of 1.5 inch solid PVC. Backfilled with #8 Sand and sealed with bentonite chips. (Top of Pipe Elevation 37.33 m)*					
80									CL							13
81																
82	25	94	31	100%												
83																12
84																
85		SPT	32	100%	70/9cm	>70										
86	26															11
87		94	33	70%												
88																
89	27															10
90																

Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B2-02	Location: 8.5 m Left of CL Align. "REV" : Station 101+18.5	E.A. 05-282801
Dist.-County-Rt.-PM 05-SB-150-1.1/1.6 -(KP) 1.6/R2.6	Project Description: Rincon Creek Bridges **51-0316, downstream**	Page 1 of 6
Date Started: 6/26/02 Completed: 6/27/02	Drill Rig: Trailer Mounted B-47, C# 4787	Depth to Water / Date
Surface Elevation: 36.85 m **120.9 ft**	Drill Method/Hammer Type: Mud Rotary/ 63.5 kg Safety Hammer	: 3.78 m **12.4 ft** : 7/5/02
Total Depth (ft.) 83.5	Drillers: Bob Gingell, Bob Enelx, Baird McKnight	: 3.79 m **12.4 ft** : 7/23/02
(meters) 25.45	Logged By: Dan Appelbaum, Sara von Schwind	:

Depth (ft / m)	Sampler/Bit	Sample Number	Recovery/Length %	Blows per 150mm	N (SPT)	Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Test Results: Wet Unit Weight (KN/cubic meter)	Test Results: Water Content (%)	Test Results: Liquid Limit (%)	Test Results: Plastic Limit (%)	Elevation (m)
0 / 0										Ground Surface					36.85
1	94mm		0												
2															36
3 / 1															
4															
5	SPT	1	0	6,8,17	23			SC		**Clayey SAND** medium dense, brown, moist, low plasticity, fine grained, angular, poorly graded					
6															35
7 / 2															
8	94mm		23					CL		**Sandy Lean CLAY with gravel and cobbles** brown, moist, low plasticity, poorly graded fine sand, gravels and cobbles appear to be sandstone, gray and brown, fine grained					
9										**Sandstone Cobbles and Boulders** greenish-gray, black, brown, hard, subrounded					
10 / 3															34
11								GP							
12	94mm	2	13												
13 / 4															33
14								SP-SC		**Poorly Graded SAND with gravel and Clay** very dense, brown with lenses of gray, moist, slight plasticity, fine grained, gravel is subrounded					
15															

5 ft thick nesting of cobbles and boulders

Groundwater at El 108.5 on 6/27/02

Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B2-02	Location: 8.5 m Left of CL Align. "REV" : STA 101+18.5	E.A. 05-282801
Dist.-County-Rt.-PM 05-SB-150-1.1/1.6 -(KP) 1.6/R2.6	Project Description: Rincon Creek Bridges	Page 2 of 6

Depth ft	Depth m	Sampler/Bit	Sampler: Sample Number	Sampler: Recovery/Length %	Sampler: Blows per 150mm	Sampler: N (SPT)	Sampler: Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Test Results: Wet Unit Weight (KN/cubic meter)	Test Results: Water Content (%)	Test Results: Liquid Limit (%)	Test Results: Plastic Limit (%)	Elevation (m)
16		SPT	3	0	12,33,50	>70			SP-SC		**Poorly Graded SAND with gravel and Clay** very dense, brown with lenses of gray, moist, slight plasticity, fine grained, gravel is subrounded					32
17	5															
18		94mm		37					GP		**Poorly graded GRAVEL** gray, black, brown, red, coarse to medium, subrounded					
									CL		**Sandy Lean CLAY** hard, brown, slightly moist, low plasticity, with fine grained sand (Casitas Formation)					
19											**Poorly graded SAND with clay** very dense, brown, slightly moist, slightly plastic, fine grained					31
20	6	SPT	4	100	30,50/12cm	>70										
21																
22																30
23	7	94mm		37												
24																
25		SPT	5	100	70/12cm	>70			SP-SC		[Lost circulation at 7.6 m and never regained circulation]					29
26	8															
27																
28		94mm		81												
29	9															28
30																

Top of Casitas Formation at El 102.9 ft

Lost drilling mud circulation implies high permeability formation clean sands

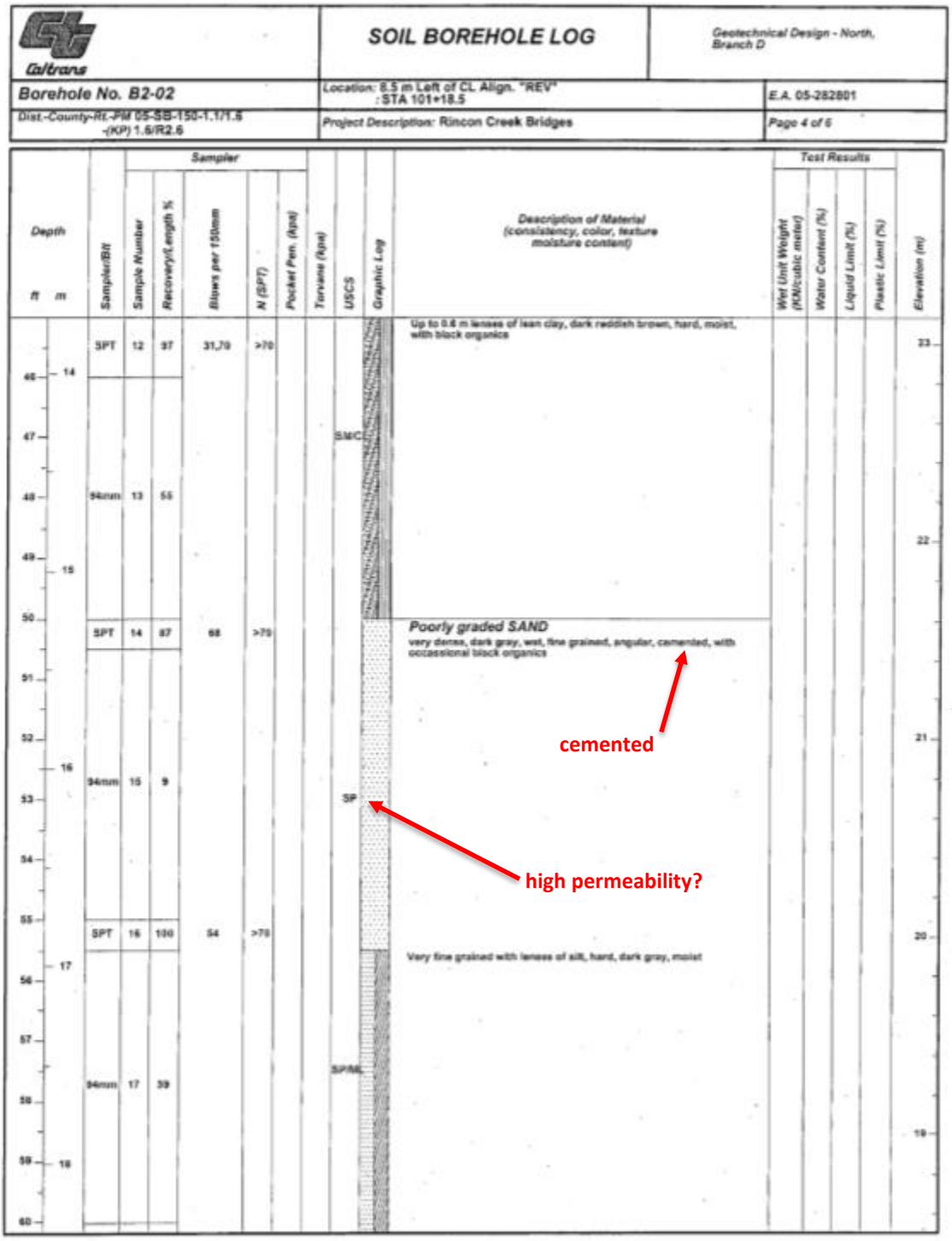
Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B2-02	Location: 8.5 m Left of CL Align. "REV" : STA 101+18.5	E.A. 05-282801
Dist.-County-Rt.-PM 05-SB-150-1.1/1.6 -(KP) 1.6/R2.6	Project Description: Rincon Creek Bridges	Page 3 of 6

Depth ft	Depth m	Sampler/Bit	Sample Number	Recovery/Length %	Blows per 150mm	N (SPT)	Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Wet Unit Weight (KN/cubic meter)	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Elevation (m)
30		SPT	6	0	38,50/21cm	>70										
31	10								RX		**Sandstone Layer** grayish-tan, very hard, fresh					
32		94mm	7	100							**Poorly graded SAND** very dense, grayish brown, moist, non-plastic, fine grained					27
33									SP							
34		94mm		100							**High permeability?**					
35											dark reddish brown, with lenses of sandy lean clay and sandy silt up to 0.15 m thickness					
36	11	SPT	8	97	32,70	>70			SP/CL							26
37											**Silty SAND** very dense, dark reddish brown, moist, angular, fine grained with layers of lean clay and silt up to 0.15 m thickness					
38		94mm	9	100												
39	12															25
40		SPT	10	100	50/11cm	>70										
41											Grayish brown and dark reddish brown with some lenses of silty sand with gravel, grayish brown fine subrounded gravel					
42									SM							24
43	13	94mm	11	36												
44																
45																



Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B2-02	Location: 8.5 m Left of CL Align. "REV" : STA 101+18.5	E.A. 05-282801
Dist.-County-Rt.-PM 05-SB-150-1.1/1.6 -(KP) 1.6/R2.6	Project Description: Rincon Creek Bridges	Page 4 of 6

Depth ft	Depth m	Sampler/Bit	Sample Number	Recovery/Length %	Blows per 150mm	N (SPT)	Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Wet Unit Weight (KN/cubic meter)	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Elevation (m)
46	14	SPT	12	97	31,70	>70					Up to 0.6 m lenses of lean clay, dark reddish brown, hard, moist, with black organics					23
47									SM/C							
48		94mm	13	55												
49	15															22
50		SPT	14	87	68	>70					Poorly graded SAND very dense, dark gray, wet, fine grained, angular, cemented, with occassional black organics					
51																
52	16															21
53		94mm	15	9					SP							
54																
55		SPT	16	100	54	>70					Very fine grained with lenses of silt, hard, dark gray, moist					20
56	17															
57																
58		94mm	17	39					SP/ML							
59	18															19
60																

cemented

high permeability?

Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B2-02

Location: 6.5 m Left of CL Align. "REV" : STA 101+18.5

E.A. 05-262801

Dist.-County-Rt.-PM 05-SB-150-1.1/1.6 -(KP) 1.6/R2.6

Project Description: Rincon Creek Bridges

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Depth ft	Depth m	Sampler: Sample with Ht	Sampler: Sample Number	Sampler: Recovery/Length %	Sampler: Blows per 150mm	Sampler: N (SPT)	Sampler: Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Test Results: Wet Unit Weight (KN/cubic meter)	Test Results: Water Content (%)	Test Results: Liquid Limit (%)	Test Results: Plastic Limit (%)	Elevation (m)
61		SPT	18	100	34,70	>70					Very fine grained with lenses of silt, hard, dark gray, moist					
62	19															18
63		94mm	19	36												
64											**Lean CLAY** hard, dark reddish brown, moist, highly plastic with structure					
65		SPT	20	100	51	>70	>431		CL		**SILT interbedded with Lean CLAY** silt, hard, dark reddish brown, moist interbedded with lean clay, hard dark reddish brown, moist with occassional black organics					17
66	20															
67																
68		94mm	21	66			>431									
69	21								CL/ML							16
70																
71		SPT	22	100	42,50/10cm	>70	>431									
72	22															15
73		94mm	23	100												
74																
75																14

Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B2-02

Location: 8.5 m Left of CL Align. "REV" ; STA 101+18.5

E.A. 05-282801

Dist.-County-Rt.-PM 05-SB-150-1.1/1.6 -(KP) 1.6/R2.6

Project Description: Rincon Creek Bridges

Page 6 of 6

Depth ft	Depth m	Sampler/Bit	Sampler: Sample Number	Sampler: Recovery/Length %	Sampler: Blows per 150mm	Sampler: N (SPT)	Sampler: Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Test Results: Wet Unit Weight (KN/cubic meter)	Test Results: Water Content (%)	Test Results: Liquid Limit (%)	Test Results: Plastic Limit (%)	Elevation (m)
	23	94mm	24	0												
76											**Clayey SAND** very dense, dark reddish brown, fine grained, angular, with occassional coarse grained, rounded, very cemented					
77																
78		94mm	25	71												13
	24								SC							
79																
80		SPT	26	100	75/11cm	>70					Fine to coarse grained					
81																12
82	25	94mm	27	100												
83																
84											End of Borehole					
85											*End of Borehole = 83.5 feet installed 60 feet of 1.5 inch slotted PVC capped with 20 feet of 1.5 inch solid PVC. Backfilled with #8 sand and sealed with bentonite chips. (Top of pipe Elevation 36.89 m)*					11
	26															
86																
87																
88																10
	27															
89																
90																

very cemented

Appendix D.2

Preliminary (Desktop) Geotechnical Report

PRELIMINARY (DESKTOP) GEOTECHNICAL REPORT

Santa Barbara-Ventura Tie-In Pipeline
Santa Barbara &
Ventura Counties, California

Submitted To:

Mr. Andrew J. Borgic, P.E.
WATER WORKS ENGINEERS
11515 West 190th Street
Suite 428
Gardena, CA 90248

Prepared by:
Bajada Geosciences, Inc.

March __, 2018
Project No. 1901.0101

BAJADA
Geosciences, Inc.

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SANTA BARBARA AND VENTURA COUNTIES, CALIFORNIA

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1 GENERAL

This report presents a preliminary (desktop) geotechnical study for Casitas Municipal Water District's (CMWD) proposed Santa Barbara-Ventura Tie-In Pipeline Project located in Santa Barbara and Ventura Counties, California, as shown on Plate 1 – Site Location Map. Our services have been performed under contract with Water Works Engineers (WWE) who is the civil engineering consultant for CMWD for the project.

The following sections present our understanding of the project, the purpose of our study, and the geotechnical findings, conclusions, and recommendations for the project. Our services were performed in general accordance with our proposal dated February 12, 2019.

1.1 PROJECT ALIGNMENT & UNDERSTANDING

We understand that CMWD intends to design and construct a new water pipeline connecting Santa Barbara County water transmission systems with Ventura County water transmission systems. Currently, we understand that such an intertie pipeline does not exist between the two counties. Thus, the proposed project consists of tying in Carpinteria Water District's system and the South Coast Conduit with a CMWD water transmission pipeline that feeds La Conchita.

Alignment maps showing the pipeline alignments studied are presented as Plate 2 – Proposed Pipeline Alignment. The proposed pipeline will extend south and east along Highway 192 from Shepard Mesa Road to a point south of the intersection of Highways 192 and 150. At that point, the alignment is proposed to extend easterly across Rincon Creek, cross Highway 150 and extend through existing avocado orchards on Rincon del Mar Ranch to tie in the with existing 20-inch diameter CMWD pipeline. We understand that the proposed pipeline will have a diameter of 16 inches and will be about 7,500 feet long.

To simplify discussions within this report, we've segregated the proposed pipeline into the following three segments and assigned stationing:

- **Santa Barbara Segment** – that portion of the pipeline alignment located within Santa Barbara County from Shepard Mesa Road to Rincon Creek (Stations 10+00 through about 57+00);
- **Rincon Creek Crossing Segment** – that portion of the pipeline alignment extending across Rincon Creek (from about Stations 57+00 to 59+00); and
- **Ventura Segment** – that portion of the pipeline alignment extending south and east from Rincon Creek to the easterly pipeline terminus (from about Station 59+00 to 85+00).

Pipeline stationing is shown on Plate 3.1.

In addition to the proposed pipeline, we understand that a pump station will be designed and constructed. The location of the pump station, its dimensions, and depths are unknown to us at this time.

The approximate center point of the pipeline has the following latitude and longitude:

- Latitude: 34° 23' 22.0" (34.389369°)
- Longitude: -119° 27' 57.7" (-119.466022°)

1.2 STUDY PURPOSE

The purpose of our preliminary geotechnical study was to gather selected, available geotechnical, geological, and hydrogeologic information pertinent to the study area to prepare a preliminary characterization of geological conditions in the study area and to provide preliminary geotechnical recommendations for the design of the project. No subsurface exploration or laboratory testing was performed as part of this "desktop" study. This study is preliminary in nature and not intended to provide design-level geotechnical data.

1.3 SCOPE OF SERVICES

Services performed for this study are in general conformance with the proposed scope of services presented in our February 12, 2019 proposal. Our scope of services included:

- Reconnaissance of the site surface conditions, topography, geomorphology, and existing drainage features;
- Attempted acquisition of selected, existing, available geotechnical data relevant to the project area. Those data collected and reviewed during this study are presented in the References Cited section of this report and relevant, available drill hole logs from previous studies are presented in Appendix A – Subsurface Information;
- Review of pertinent, selected regional geological data;
- Review of selected historical aerial photographs of the project region presented in Appendix B – Historical Aerial Photographs;
- Preparation of this report, which includes:
    - A description of the proposed project;
    - A description of site surface conditions observed during our site reconnaissance;
    - A preliminary characterization of subsurface conditions likely to be encountered along the project pipeline alignments discussed in

Section 1.1;

- 2016 California Building Code (CBC) seismic design criteria;
- Alignment maps presented as Plate 2;
- A geologic map showing the projected surface distribution of geological materials along the project alignments. Those maps are presented as Plates 3.1 through 3.2 – Geotechnical Maps;
- Preliminary geotechnical recommendations for:
    - Suitability of on-site materials for use as engineered fill;
    - Allowable bearing capacities for manhole and other foundations;
    - Temporary excavations, shoring, and trench backfill; and
- Appendices that present information reviewed for this study.

2 DATA REVIEWED

Data reviewed in preparation of this preliminary geotechnical study included historical aerial photographs, historical topographic maps, regional geological and hydrogeologic information, and subsurface information presented in Caltrans geotechnical reports for studies in the project region. Private sources, WWE, Geotracker, Envirostor, U.S. Geological Survey, California Geological Survey, Caltrans, and other sources were contacted to obtain geotechnical data. The following sections discuss those data sources.

2.1 HISTORICAL AERIAL PHOTOGRAPHS & TOPOGRAPHY

Historical aerial photographs for the project area were reviewed. Those aerials photographs consisted of the following:

HISTORICAL AERIAL PHOTOGRAPHS REVIEWED			
Flight Line	**Date**	**Scale**	**Frames**
C-430	1929	1:24,000	A-22 to A-26
C-509	1929	1:18,000	B-7 to B-11
C-4950	1937	1:24,000	SF-144 to -146 & SF-154 to -156
C-9113	1944	1:7,200	3-1 to 3-5 & 1-44 to 1-46
C-9800	1945	1:14,400	10-1060, 10-1061, & 10-1152 to -1155
GS-EM	1947	1:24,000	6-148 to 6-151
C-12790	1948	1:7,200	9-64 to 9-68
BTM_1954	1954	1:20,000	10K-184 to 10K-186
HA-AN	1956	1:9,600	6-18 to 6-21
HA-GN	1959	1:15,600	101 to 105
HB-FV	1965	1:6,000	36 to 39
HB_IU	1966	1;12,000	101 to 103
HB-NN	1969	1:6,000	19 to 22
HB-RD	1970	1:6,000	1 to 3
HB-SY	1971	1:6,000	41 to 44
PW-17206-SBFlood	1984	1:24,000	5 & 6
PW-VEN-11	1994	1:24,000	207-209

Selected aerial photographs are presented in Appendix B.

Topographic maps from the years 1904, 1910, 1918, 1921, 1938, 1946, 1953, 1961, 1962, 1964, 1968, 1975, 1989, 2000, 2012, and 2015 were reviewed for this study.

2.2 REGIONAL MAPS

A number of regional geological maps were collected and reviewed for this study. Those maps include Moser & Frizzell (1982), Maltby (1984), Dibblee & Ehrenspeck (1987), Bezore & Wills (1999), Tan & Clahan (2004), Gutierrez et al. (2008), and Minor & Brandt (2015). Plates 3.1 through 3.2 shows the geologic conditions along the project alignment based on

review of those sources with modifications based on our aerial photograph review and site observations.

2.3 GEOTECHNICAL & ENVIRONMENTAL STUDIES

The project area is located in a relatively rural environment where few site-specific sources of data are available. Searches for subsurface data in the project area were made through the California State Water Board's Geotracker database (Geotracker, 2019) and the California Department of Toxic Substance Control's Envirostor database (Envirostor, 2019). In both cases, no relevant subsurface geologic or environmental data were available in the project region.

Subsurface data was obtained from the California Department of Transportation (Caltrans, 1995 & 2002) for Bridge No. 51-0317 and 51-0316, respectively, on Highway 150 crossing Rincon Creek. Those bridges are located about 500 feet northeast and 1,400 feet southwest of the proposed pipeline crossing of Highway 150, respectively. Locations of the bridges are shown on Plate 3.2. The Log of Test Borings (LOTB) for those bridges are included in Appendix A.

2.4 SOILS SURVEY

Soil data for the project area was obtained from the Natural Resources Conservation Services Soil Survey website (NRCS, 2018). The following soils series are located beneath or proximal to the proposed pipeline alignment:

SOIL UNITS ALONG PIPELINE ALIGNMENT

Soil Unit No.	Soil Unit Name
Cb	Camarillo Variant, fine sandy loam
EaB	Elder Sandy Loam 2% to 9% slopes
GcA	Goleta Fine Sandy Loam, 0% to 2% slopes
MdF	Milpitas Stony Fine Sandy Loam, 30% to 50% slopes
MeC	Milpitas Stony Fine Sandy Loam, 2% to 9% slopes
MeD2	Milpitas-Positas Fine Sandy Loam, 9% to 15% slopes
MeE2	Milpitas-Positas Fine Sandy Loam, 15% to 30% slopes
MeF2	Milpitas-Positas Fine Sandy Loam, 30% to 50% slopes
OAG	Orthents, 50% to 75% slopes
AcC	Anacapa Sandy Loam, 2% to 9% slopes
GxG	Gullied Land
LkF	Lodo Rocky Loam, 30% to 50% slopes
LoD2	Los Osos Clay Loam, warm, 9% to 15% slopes
MoC	Mocho Loam, 2% to 9% slopes
ScG	San Benito Clay Loam, 50% to 75% slopes
SoE2	Sespe Clay Loam, 15% to 30% slopes
SoF	Sespe Clay Loam, 30% to 50% slopes
SwC	Sorrento Loam, 2% to 9% slopes

The distribution of the proposed pipelines across those units is shown on Plate 4 – Soil Survey Map. Those soils have the following reported characteristics:

SOIL SURVEY DATA

Soil Unit	USCS Symbol	Grain-Size (%)			Plasticity Index	Liquid Limit	K (cm/sec)	Corrosivity	
		Clay	Silt	Sand				Concrete	Steel
Cb	ML	30.5	34.4	35.1	22.5	43.8	$1.2x10^{-3}$	Moderate	High
EaB	SC	13.0	20.0	67.0	8.0	28.3	$5.5x10^{-3}$	Low	Low
GcA	CL/ML	13.0	26.4	60.6	7.4	27.7	$9.0x10^{-4}$	Low	High
MdF	SM	29.8	21.7	48.5	20.6	41.5	$2.3x10^{-3}$	Low	Moderate
MeC	SM	31.7	28.3	48.5	22.4	44.5	$2.3x10^{-3}$	Low	Moderate
MeD2	CL/ML	35.0	23.5	41.5	24.7	46.1	$2.1x10^{-3}$	Low	High
MeE2	CL/ML	35.0	23.5	41.5	24.7	46.1	$2.1x10^{-3}$	Low	High
MeF2	CL/ML	35.0	28.3	41.5	24.7	46.1	$2.1x10^{-3}$	Moderate	High
OAG									
AcC	SC/SM	12.0	29.5	58.5	7.0	25.3	$2.8x10^{-3}$	Low	High
GxG									
LkF	CL	22.5	37.7	39.8	15.0	30.0	$5.6x10^{-3}$	Low	Low
LoD2	CL	38.3	37.1	24.6	26.9	50.5	$7.4x10^{-5}$	Low	High
MoC	CL	24.5	37.0	38.5	16.5	36.8	$9.1x10^{-4}$	Low	Moderate
ScG	CL	31.0	34.0	35.0	21.6	43.8	$1.6x10^{-4}$	Low	Moderate
SoE2	ML	36.4	31.7	31.9	14.5	36.5	$9.8x10^{-5}$	Low	High
SoF	ML	35.9	31.8	32.2	14.1	36.4	$1.2x10^{-4}$	Low	High
SwC	CL	26.7	44.7	28.6	18.0	39.5	$4.7x10^{-4}$	Low	Moderate

Obtained from NRCS (2018); If cell is empty, no information was available from NRCS (2018).

3 FINDINGS

3.1 ALIGNMENT CONDITIONS

The proposed alignment is located along or crosses existing state highway systems (SR150 and SR192) and agricultural roadways. When not located beneath roadways, the proposed alignment crosses agricultural lands developed primarily with avocados. A relatively short segment of the alignment crosses fallow lands as the pipeline crosses Rincon Creek. Those fallow lands are covered with oak trees and seasonal and perennial shrubs and grasses.

The Santa Barbara segment is characterized by lands having relatively flat to steep slopes. Immediately south of Shepard Mesa Road (Station 10+00) to about Station 25+50, the alignment is located on relatively flat ground with gradients of less than about 10 percent. Between about Stations 25+50 to 41+00, the alignment is located on moderately inclined ground with slopes ranging from about 10 to 20 percent and having localized relatively steep slopes located adjacent to the proposed alignment. Between about Station 41+00 to the Rincon Creek crossing, the alignment traverses relatively steep slopes with gradients ranging from about 20 to over 100 percent. Thus, slope gradients along the Santa Barbara segment range from less than about 5 percent to over 100 percent slopes. The proposed slope gradients along the Rincon and Ventura segments are relatively flat with slope gradients ranging from less than about 5 percent to up to about 20 percent. Elevations, based on the 7.5-minute USGS White Ledge Peak Quadrangle topographic map, range from about 140 to 280 along the entire alignment.

Drainage along the proposed alignment occurs as sheetflow into Rincon Creek or into a closed depression located south of Shepard Mesa Road.

3.2 GEOLOGIC CONDITIONS

3.2.1 Regional Geology

The project site is located within the Transverse Ranges geologic/geomorphic province of California. That province is characterized by generally east-west-trending mountain ranges composed of sedimentary and volcanic rocks ranging in age from Cretaceous to Recent. Major east-west trending folds, reverse faults, and left-lateral strike-slip faults reflect regional north-south compression and are characteristic of the Transverse Ranges

3.2.2 Local Geologic Setting

As shown on Plates 3.1 through 3.2, the proposed pipeline alignment extends across a variety of Plio-Pleistocene-age and more recent sediments. The following table presents the anticipated geological materials that will be crossed by the proposed pipeline on a station by station basis:

UNDERLYING GEOLOGIC MATERIALS			
Stationing		Mapped Geologic Unit[1]	Considerations
From	To		
10+00	25+00	Alluvial Deposits	Poorly consolidated. Likely predominately granular with local fine-grained deposits. Localized to regionally abundant gravels, cobbles, and boulders. Local shallow groundwater.
25+00	57+50	Older Alluvium	Moderately consolidated. Predominately granular with local gravels, cobbles, and possibly boulders.
57+50	85+00	Younger Alluvium	Poorly consolidated. Abundant gravels, cobbles, and boulders were encountered by Caltrans (1995, 2002). Relatively shallow groundwater.
[1] – See Plates 3.1 and 3.2			

Aside from alluvial deposits discussed above, the Santa Barbara and Casitas Formations are present in the project area. The Santa Barbara Formation consists of Pleistocene-age shale, siltstone, clayey sandstone and sandstone, with local conglomerate beds. This is a marine deposit that locally contains fossils and may interfinger with terrestrial deposits of the overlying Casitas Formation. The Casitas Formation is a Pleistocene-age, terrestrial sedimentary deposit consisting of sand, silt, clay, siltstone, sandstone and conglomerate.

Landslide deposits are present on slopes below the pipeline alignment between about Station 40+00 and 50+00 and on slopes flanking the Ventura Segment of the pipeline alignment, as shown on Plate 3.1. Those landslide deposits are largely confined to the Casitas Formation and range from active to dormant.

3.2.3 Groundwater

The project is located within the Carpinteria Groundwater basin. Depths to groundwater along the proposed alignment are unknown except at drill holes advanced by Caltrans along Rincon Creek. At those locations, in December of 1995 and June of 2002, groundwater was measured at depths of about 11 feet below the road surface of Highway 150. This groundwater elevation likely corresponds to about the water surface elevation of Rincon Creek at the time the measurements were performed.

Maltby (1984) mapped 1982 regional groundwater elevations for the project region. The depth to the regional groundwater table at that time ranged from about 50 feet at about Station 65+00 to 68 feet at about Station 20+00.

Few other sources of subsurface data are available to estimate depths to groundwater and seasonal fluctuations of groundwater elevations. A database search was performed in the

California Department of Water Resources Water Library database (DWR, 2019) to estimate regional groundwater levels and no local well data were identified.
Relatively shallow groundwater is likely to be seasonally encountered between about Stations 15+00 and 24+00 where a closed depression is located. That depression would historically routinely flood Highway 192 and surrounding lands. Around 1989, a basin was constructed in this area to capture and seasonally hold stormwater. When this basin is retaining water, then shallow groundwater will likely be encountered in this area.

The depths of groundwater should be further evaluated during design-level studies for the proposed project.

3.2.4 Geoenvironmental Conditions

A search for possible sites having geoenvironmental concerns was performed through a search of the Geotracker and Envirostore databases. No known geoenvironmental (hazardous materials, contaminants, fuel spills, etc.) were identified within 3,000 feet of the proposed pipeline alignment. Being a rural, agricultural area, there are likely few reported geoenvironmental conditions in the region of the alignment. On many of these farms, fuel storage tanks have historically been present but are not currently in state or federal databases and, thus, if present, their locations are unknown.

In addition, a variety of herbicides and pesticides have been placed on agricultural lands in the area and no records are available to anticipate the types of chemicals used and potential risks of exposure. If this is of concern then spot samples of soils along the alignment can be obtained and tested for organic and inorganic constituents prior to construction.

4 GEOLOGICAL HAZARDS

4.1 FAULTING

4.1.1 General

The State of California designates faults as Holocene-age or Pre-Holocene-age depending on the recency of movement that can be substantiated for a fault. Fault activity is rated as follows:

FAULT ACTIVITY RATINGS		
Fault Activity Rating	**Geologic Period of Last Rupture**	**Time Interval (Years)**
Holocene-Active	Holocene	Within last 11,000 Years[1]
Pre-Holocene	Quaternary & Older	>11,000 Years[1]
Age Undetermined	Unknown	Unknown

[1] – Holocene is defined as 11,700 years before present by the International Commission on Stratigraphy. The California State Mining and Geology Board, which administers the review and application of the Alquist-Priolo Earthquake Fault Zoning Act, currently recognizes the Holocene as 11,000 years before present.

The California Geologic Survey (CGS) evaluates the activity rating of a fault in fault evaluation reports (FER). FERs compile available geologic and seismologic data and evaluate if a fault should be zoned as Holocene-active, pre-Holocene, or age undetermined. If a FER evaluates a fault as Holocene-active, then it is typically incorporated into a Special Studies Zone in accordance with the Alquist-Priolo Earthquake Fault Zoning Act (AP). AP Special Studies Zones require site-specific evaluation of fault location for structures for human occupancy and require a habitable structure setback if the fault is found traversing a project site.

The proposed pipeline alignment is located in an area having numerous local and regional faults, as shown on Plate 5 – Regional Fault Map. The site is not located within an Alquist-Priolo Earthquake Fault Zone established by the State. However, the project site is on the eastern margin of the Santa Barbara Fold Belt (Keller & Gurrola, 2000) and extends along the mapped trace of the Rincon Creek fault between about Stations 23+00 and 40+00, as shown on Plate 3.1. The Rincon Creek fault is a northwest-trending reverse-oblique fault that initiates about a mile southeast of the eastern pipeline alignment terminus and extends northwest for between about 12.5 to 20 miles (20 to 32 kilometers) possibly joining with the Mesa fault and More Ranch fault systems (Keller & Gurrola, 2000; Hough & Martin, 2018). The fault is south dipping at about 45 to 55 degrees and has a right-oblique sense of displacement (Minor & Brandt, 2015).

The fault is considered age undetermined by the State but is considered Holocene-active by

Keller & Gurrola (2000) and Hough & Martin (2018). Hough & Martin (2018) speculate that the Rincon Creek-Mesa fault system was responsible for the M6.5 or M6.8 (depending on the researcher) 29 June 1925 Santa Barbara Earthquake. We know of no paleoseismic exploration that has been performed on the Rincon Creek fault to establish the age of the fault as Holocene-active; however, geomorphically, the fault exhibits features that appear relatively youthful.

4.1.2 Fault Location

The most recently mapped trace of the Rincon Creek fault in the project area is shown on Plate 3.1 (Minor & Brandt, 2015). That trace extends parallel and beneath Highway 192 and the proposed pipeline between about Stations 23+00 and 40+00. The fault trace mapped in black on that plate was likely based on review of aerial photographs, field mapping, and the geologist's discretion. The trace of the Rincon Creek fault (in black) shown on that map diverges from the trace show in the California Geological Survey (CGS) and U.S. Geological Survey (USGS) fault catalogue, which is shown in brown. The brown trace also crosses the proposed pipeline alignment at about Station No. 82+00. No known paleoseismic or fault location trenches or geophysical surveys have been performed to identify the actual surface trace of the fault plane in this area.

Our review of aerial photographs along the alignment tends to corroborate the mapping performed by Minor & Brandt (2015) but also identified a lineation located northeast of the mapped trace of the Rincon Creek fault. That lineation is shown in red on Plate 3.1. In aerial photographs from 1929 and 1937, there is a topographic and tonal lineation located downslope from Highway 192 that could be associated with the fault. This lineation is located coincident with the topographic low at the base of slope and the tonal variance could be a depositional material change within the swale. Smith (1977), also mapped a potential fault trace in the same general location. If the actual trace of the Rincon Creek fault is located along this lineation, then the proposed alignment will cross the fault at about Station 23+00, extend across the fault hanging wall, and re-cross the fault trace at about Station 42+00.

4.1.3 Estimates of Fault Displacement

Deformation of the Rincon Creek fault was modeled to evaluate the amount of potential displacement that could be experienced due to fault rupture. Modeling was performed using deterministic methods along with a Probabilistic Fault Displacement Hazard Analysis (PFDHA) using empirical fault data. It should be noted that little quantitative fault displacement and age information is available for the Rincon Creek fault and that the following sections are provided to give an illustration of displacement magnitudes that might be expected from an earthquake along the fault. These values should be refined based on

future site-specific paleoseismic evaluations of the fault prior to use in design-level services for the proposed pipeline.

4.1.3.1 Fault Model Input Values

The following are characteristics of the Rincon Creek fault that were established for displacement modeling:

FAULT SYSTEM CHARACTERISTICS	
Fault Length (km/miles)[1]	32/20
Fault Depths (km/miles)[2]	3/2
Inclination of fault plane (degrees)[3]	55
Slip Rate (mm/yr)[4]	0.3
Aseismic factor[5]	0

[1] – Per Keller & Gurrola (2000) and Hough & Martin (2018).
[2] – Fault depth based on estimates of Jackson (1981).
[3] – Inclination of faults based on Minor & Brandt (2015) and Jackson (1981).
[4] – Slip rate estimated by SCEDC (2019) and Keller & Gurrola (2000).
[5] – No known creep is occurring on the Rincon Creek fault. Therefore a "0" value is applied.

4.1.3.2 Deterministic Displacement Modeling

The moment magnitude (Mw) of the fault was estimated using methods of the Hanks & Bakun (2008) magnitude-area relation. Using the equation:

$$M_W = \text{Log}A + 3.94$$

Where A is the fault rupture area (km^2) and where A is less than 537 km^2, a Mw of 5.9 was estimated for the fault system. That M_W was used in the following regression to estimate average deterministic displacement that could occur across the fault:

$$\text{Log (AD)} = (M_W * 0.3244) - 2.2192$$

The regression was developed by Wells & Coppersmith (1994) and improved on by Ross (2011). Results of that evaluation indicate that up to 0.5 m (about 1.6 feet or 20 inches) of displacement could occur along the fault system.

4.1.3.3 Probabilistic Fault Displacement Hazard Analysis

PFDHA methods described by Shantz (2013) were utilized to estimate displacement of the fault at varying exposure periods. The evaluations were performed using the Mw estimated in Section 4.1.3.2. Fault slip rate and aseismic factor used in the analyses are presented in Section 4.1.3.1. The crustal rigidity value used in the probabilistic evaluation was $3x10^{11}$

dyne/cm^2 and the standard deviation of fault displacement used was 0.39. Five methods were used to estimate average displacement (AD) values for the fault:

1. Log (AD) = 0.9 M_W - 6.32 (Wells & Coppersmith, 1994)
2. AD = 0.2*$L^{0.5}$ where L= fault length (Wesnousky 1, 2008)
3. Log (D) = (LogM_0*0.2)-2.01, where D=displacement (Yen & Ma, 2011)
4. AD = L*0.2 (Wesnousky 2, 2008)
5. Log (AD) = (0.3244* M_W)-2.2192 (Ross, 2011)

Using those values, a probabilistic evaluation of fault displacement was estimated for the Rincon Creek fault. The evaluation using the regression from Wells & Coppersmith (1994) and Ross (2011) yielded the lowest and highest estimated displacement at any given exposure period, respectively. We recommend that displacement values be estimated for a Maximum Considered Earthquake (MCE) event corresponding to a 2% chance of exceedance in a 50-year exposure period (2,500-year exposure period), as adopted by the California Building Code (CBC). Those results, based on a maximum considered earthquake (MCE) event, estimate the following displacements along the fault system based on our aforementioned input values:

RESULTS OF PFDHA		
Method	**Displacement[1]**	
	Feet	**Inches**
Wesnousky 1 (2008)	1.3	16
Wells & Coppersmith (1994)	0.4	5
Yen & Ma (2011)	0.6	7
Wesnousky 2 (2008)	0.5	6
Ross (2011)	2.1	25
Average	**0.9**	**12**
[1] – based on a 2% chance of exceedance in any 50-year time-period.		

Based on these evaluations, an average displacement value of 12 inches can be anticipated during any 2,500-year time period.

4.2 CBC SEISMIC DESIGN RECOMMENDATIONS

We understand that the proposed project will be designed and constructed under the 2016 California Building Code (CBC) criteria. At a minimum, improvements should be designed in accordance with the following seismic design criteria:

CBC SEISMIC DESIGN PARAMETERS		
California Building Code	**Parameter**	**CBC Designation**
Site Coordinates	Latitude	34.389369°
	Longitude	-119.466022°
Section 1613.3.3 Table 1613.3.3(1)	Site Coefficient, F_a	1.00
Section 1613.3.3 Table 1613.3.3(2)	Site Coefficient, F_v	1.50
Section 1613.3.1 Figure 1613.3	Site Class Designation	D
	Seismic Factor, Site Class B at 0.2 Seconds, S_s	2.679g
	Seismic Factor, Site Class B at 1.0 Seconds, S_1	0.962g
Section 1613.3.3	Site Specific Response Parameter for Site Class D at 0.2 Seconds, S_{MS}	2.679g
	Site Specific Response Parameter for Site Class D at 1.0 Seconds, S_{M1}	1.443g
Section 1613.3.4	$S_{DS}=2/3S_{MS}$	1.786g
	$S_{D1}=2/3S_{M1}$	0.962g

4.3 LANDSLIDES

Active and dormant landslides are present throughout the project area, as shown on Plate 3.1. The closest landslide to the proposed alignment is located between about Stations 40+00 and 50+00. At that location, cut-bank erosion along Rincon Creek has undermined the slope located below the proposed pipeline alignment in this area resulting in a rotational/translational landslide located below agricultural lands south of the alignment and earthflows located immediately below Highway 192. All aerial photographs reviewed from 1922 to present show the presence of this landslide. In general, the landslide appears to expand during years having relatively high precipitation levels and remain relative dormant during years of average or low precipitation. Specifically, aerial photographs from 1945, 1956, 1969/1970, 1983, and 1998 show landslide growth at this location, which follow years having relative high rainfall volumes. Thus, the landslide growth appears to occur episodically.

Following the relatively high precipitation 1969 season, the 1970 aerial photographs show that grading had occurred on the landslide, presumably to increase the feature's stability and reduce the risk to Highway 192. Currently, the head scarp of the landslide is located

immediately adjacent to the shoulder of Highway 192 and concrete K-rails have been placed along the margin of the road for public safety.

Additional landslides are located along the Ventura segment between about Station 70+00 and 85+00. These landslides are located on the slopes above the alluvial valley and consist of dormant and older landslide deposits. Recent movement of these landslides was not observed during our field visit nor on historical aerial photographs reviewed.

4.4 LIQUEFACTION

Liquefaction is described as the sudden loss of soil shear strength due to a rapid increase of soil pore water pressures caused by cyclic loading from a seismic event. In simple terms, it means that a liquefied soil acts more like a fluid than a solid when shaken during an earthquake. In order for liquefaction to occur, the following are needed:

- Granular soils (sand, silty sand, sandy silt, and some gravels);
- A high groundwater table; and
- A low density in the granular soils underlying the site.

If those criteria are present, then there is a potential that the soils could liquefy during a seismic event.

The adverse effects of liquefaction include local and regional ground settlement, ground cracking and expulsion of water and sand, the partial or complete loss of bearing and confining forces used to support loads, amplification of seismic shaking, and lateral spreading. In general, the effects of liquefaction on the proposed project could include:

- Lateral spreading;
- Vertical settlement; and/or
- The soils surrounding lifelines can lose their strength and those lifelines can become damaged or severed.

Lateral spreading is defined as lateral earth movement of liquefied soils, or soil riding on a liquefied soil layer, down slope toward an unsupported slope face, such as a creek bank, or an inclined slope face. In general, lateral spreading has been observed on low to moderate gradient slopes but has been noted on slopes inclined as flat as one degree.

Granular soils were reported in the upper 15 feet of the soil column in drill hole B1-02 advanced by Caltrans for Bridge 05-SB-0316. Those granular soils ranged in consistency from loose to medium dense. Groundwater was reported at a depth of about 11 feet in that drill hole, indicating about 4 feet of the granular soils were located beneath the groundwater

table. That groundwater table will vary based on the water surface within Rincon Creek. The granular soils encountered within the Younger Alluvium, being loose to medium dense and in the presence of shallow groundwater. could have a potential to liquefy or spread laterally. This should be evaluated further during design-level studies.

4.5 EXPANSION POTENTIAL

There is a direct relationship between plasticity of a soil and the potential for expansive behavior, with expansive soil generally having a high plasticity. Thus, granular soils typically have a low potential to be expansive, whereas, clay-rich soils can have a low to high potential to be expansive.

Plasticity Index (PI) tests were not performed for the studies compiled and reviewed for this report. PI values, however, were reported by NRCS (2019) for the project area and ranged from about 7 to 27, with an average PI of about 16. PI Values for soils underlying the alignment shown on Plate 2 range from 7 to 24.7. Those PI values indicate the soils along the proposed pipeline segment have an expansion potential ranging from very low to medium/high, with an average of low to medium, as noted in the following table (Day, 1999):

EXPANSION POTENTIAL – PLASTICITY INDEX CORRELATION

Plasticity Index	Correlated Expansion Potential
0 – 10	Very Low
10 – 15	Low
15 – 25	Medium
25 – 35	High
35+	Very High

Taken from Day (1999)

4.6 CORROSION

Soil chemistry tests for evaluation of corrosion potential were performed by Caltrans (2002) for bridge 05-SB-0316 located along Highway 150 about 1,400 feet southwest of the proposed pipeline crossing of that roadway. Five soil tests were performed for that bridge to evaluate pH, sulfates, chlorides, and resistivity of those soils. The following table presents the results of those tests:

SOIL CHEMISTRY RESULTS					
Boring	**Sample Depth**	**Sulfates (ppm)**	**Chlorides (ppm)**	**pH**	**Resistivity (ohms-cm)**
B1-02	1.5' to 2'			7.5	2,240
B1-02	12' to 16'	1,000	110	7.5	620
B2-02	46' to 50'			8.2	1,570
B2-02	16' to 19.5'			8.5	1,670
B2-02	65' to 69.5'			8.4	1,440
Data derived from Caltrans (2002). If cell is blank, no test results were reported.					

According to the ACI-318, a sulfate concentration below 0.10 percent by weight (1,000 ppm) is negligible. A chloride content of less than 500 ppm is generally considered non-corrosive to reinforced concrete. Based on the results of the soil chemistry tests, the site soils have a low potential for corrosion of concrete due to sulfates and chlorides.

Caltrans (2002) also performed minimum resistivity testing the soil samples. A commonly accepted correlation between soil resistivity and corrosivity towards ferrous metals (NACE Corrosion Basics, 1984) is provided below:

RESISTIVITY & CORROSION CORRELATION	
Minimum Resistivity (ohm-cm)	**Corrosion Potential**
0 to 1000	Severely Corrosive
1,000 to 2,000	Corrosive
2,000 to 10,000	Moderately Corrosive
Over 10,000	Mildly Corrosive

Thus, according to the table above, the soils are estimated to be corrosive to severely corrosive to metal.

Confirmatory sampling and testing should be performed during design-level studies.

4.7 NATURALLY OCCURRING ASBESTOS

Ultramafic rock, such as serpentinite, amphibolite, peridotite, dunite, pyroxenite, hornblendite, etc., can contain asbestiform minerals, which are fibrous, silica-rich crystals that can cause lung cancer, mesothelioma, asbestosis, and other health-related issues, if present. Typically, six minerals within ultramafic rocks are responsible for the primary, naturally occurring asbestiform concerns for health-related issues: chrysotile, tremolite, actinolite, anthophyllite, crocidolite, and amosite. These minerals may or may not be present in ultramafic rocks; thus, the presence of ultramafic rock does not automatically indicate that there is a health hazard. The presence of asbestiform minerals can sometimes be discerned in the field based on visual examination of rock exposures but, most often, must be confirmed using laboratory testing.

Naturally occurring asbestos can be hazardous to human health if it is disturbed, becomes airborne and is inhaled. If NOA is not disturbed and fibers are not released into the air, then it is typically not considered a health hazard. Inhalation is the primary exposure route of concern, because breathing asbestos fibers may cause them to become trapped in the lungs. Ingestion is another, albeit less common, pathway of concern, because swallowing asbestos fibers may also cause the fibers to be trapped in body tissues. Asbestos is not absorbed through the skin, so merely touching it does not pose a significant risk to human health. Asbestos fibers are not water soluble and do not move through groundwater to any appreciable extent. Based on studies of other insoluble particles of similar size, the expected migration rate of an asbestos fiber through soils by the forces of groundwater is approximately 1 to 10 centimeters (0.4 to 4 inches) per 3,000 to 40,000 years (New Hampshire DES, 2010). Thus, asbestos is not considered a groundwater contaminant.

Ultramafic rocks have been not been mapped in the project area and were not encountered within explorations reviewed for this study. It is our opinion that NOA has a low potential to adversely impact the project.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 GENERAL

Based on the results of our preliminary study, it is our opinion that there are geologic hazards along the alignment that might require mitigation or avoidance to reduce risks associated with construction of the project, as described in Section 1.1. Discussions regarding these geologic hazards are presented below.

Specific comments and preliminary recommendations regarding the geotechnical aspects of project design and construction are presented in the following sections of this report and are intended to assist in project refinement and are preliminary in nature. The recommendations presented, herein, should not be considered design-level and used for project design without further geotechnical exploration, laboratory testing, and analyses.

In addition, recommendations presented, herein, are based upon the preliminary site alignment illustrations provided by WWE along with stated assumptions. Changes in the configuration from those studied during this investigation may require supplemental recommendations.

5.2 GEOLOGIC HAZARDS

Five potential geologic hazards could impact the proposed pipeline performance:

- Faulting;
- Slope Instability;
- Liquefaction;
- Expansive Soils; and
- Corrosive Soils

In our opinion, based on the data reviewed, all other geologic hazards discussed herein pose a low risk for the performance of the pipeline along the proposed alignment.

5.2.1 Faulting

The proposed pipeline alignment is situated parallel to and almost directly on top of the mapped trace of the Holocene-Active Rincon Creek fault. Our mapping has identified that the trace of the fault could extend northeast of the mapped trace, as shown on Plate 3.1; however, no site-specific exploration has been performed to confirm where the actual fault trace is located.

Deterministic and probabilistic (2-percent chance of exceedance in any 50-year period) rupture offsets of 20 and 12 inches, respectively, might occur across the fault due to an

earthquake on the Rincon Creek fault. These offsets could deform and damage the proposed pipeline between about Stations 23+00 and 40+00 and possibly at about Station 82+00.

There are no mitigations to prevent the fault from rupturing. However, rupture events can be separated by very long time intervals and there is a potential for the pipeline to be constructed and outlive its operational life without a rupture event occurring along the Rincon Creek fault. Without paleoseismic data specific to the fault, it is not possible to estimate the recurrence interval between rupture events and when the last rupture event occurred. Therefore, an opinion cannot be made about the likelihood of fault rupture during the operation life of the proposed pipeline.

If mitigations of fault hazard risks are desired, then reduction of those risks typically involves one of the following:

- Relocating the pipeline alignment away from the fault;
- Designing the pipeline to accommodate fault deformation; or
- Do nothing.

5.2.1.1 Pipeline Alignment Relocation Alternative

This alternative consists of avoidance of the fault to eliminate the potential risk of damage. For this project, the alignment would be moved northeast between about Stations 20+00 and 45+00. The realignment should stay southwest of the mapped unnamed antithetic fault noted on Plate 3.1. This realignment would involve obtaining easements across private properties and disrupting agricultural lands. Design-level studies would involve fault location exploration so that the alignment will not be sited on either fault.

5.2.1.2 Pipeline Accommodates Deformation Alternative

If the trace of the Rincon Creek fault directly underlies the pipeline between Stations 23+00 and 40+00, then this alternative may not be feasible because the entire pipeline along this segment will experience deformation during fault rupture. Thus, if this alternative is to be considered, then fault location studies should be performed to identify where the trace of the fault projects to the surface.

If the trace of the fault is not directly beneath the proposed pipeline alignment, then this alternative might be viable. Under this scenario, the proposed pipeline alignment crosses the fault and the majority of the pipeline in this segment is on the fault hanging wall. Thus, fault movement would need to be accommodated where the pipeline crosses the fault along with some bending stresses that might occur due to deformation of the hanging wall during rupture.

Where the pipeline crosses the fault, deformation might be accommodated using extendable/compressible and flexible pipeline joints that allow absorption of deformation without interference with pipeline performance. Additional studies need to be performed to quantify the maximum deformation for use in design-level studies but based on our illustrative preliminary evaluations, up to 20 inches of reverse-oblique deformation might be experienced at each crossing location. This means that the pipeline would be put under compression (length shortened) and would move right-laterally (when looking directly across the fault). The total displacement of horizontal, lateral, and vertical movement vectors that might occur is unknown and requires further evaluation to quantify for design-level studies.

In addition, warping of the hanging wall might be experienced during fault rupture. This warping will likely occur as an arching of hanging wall sediments with the axis of the arch paralleling the fault system. Most flexible pipelines can accommodate some bending stresses and the amount of bending that might occur will need to be quantified during design-level studies. If the pipe is found able to accommodate the bending, then mortar coating and lining (if proposed) may not be feasible for corrosion resistance along this segment of pipeline due to cracking.

5.2.1.3 Do Nothing Alternative

This alternative consists of constructing the alignment as proposed with the anticipation that it will be damaged during a rupture along the Rincon Creek fault. Under such a scenario, temporary repair materials can be stockpiled that can be used to rapidly bring the pipeline back into service. Those repair materials are likely to consist of appropriately sized HDPE or interlocking PVC pipe that can be installed relatively quickly on the ground surface to bypass the damaged pipeline segmentd. This could consist of installing flanges along the pipeline at about Stations 20+00 and 45+00 on which those pipeline materials could be attached for the bypass.

5.2.2 Slope Instability

The head scarp of landslides caused by cut-bank erosion along Rincon Creek between about Stations 41+00 and 50+00, is impinging upon Highway 192 and could destabilize this section of the proposed pipeline alignment. The likelihood of this segment of the alignment being adversely affected by slope instability is unknown and should be quantified during design-level studies. If those studies find that the slope stability poses a risk too great for CMWD to accept then three mitigation alternatives are available:

- Reroute the pipeline alignment;
- Stabilize the underlying slope; or
- Do nothing.

5.2.2.1 Pipeline Alignment Relocation Alternative

This alternative consists of rerouting the alignment north to avoid the risk. Stability analyses should provide the minimum distance to the north that the alignment will require relocation to reduce those risks. This realignment would involve obtaining easements across private properties and disrupting agricultural lands.

5.2.2.2 Slope Stabilization Alternative

This alternative would involve installing measures to stabilize the slope beneath that pipeline segment to reduce the risk of slope failure. For this local, typical slope stabilization measures could consist of installation of soil nails or construction of a soldier-pile or tie-back wall. Because the stabilization measures will also benefit Caltrans, there could be a potential for cost-sharing of these mitigation measures.

5.2.2.3 Do Nothing Alternative

This alternative consists of constructing the alignment as proposed with the anticipation that it will be damaged due to slope failure beneath this segment. Under such a scenario, temporary repair materials can be stockpiled that can be used to rapidly bring the pipeline back into service. Those repair materials are likely to consist of appropriately sized HDPE or interlocking PVC pipe that can be installed relatively quickly on the ground surface to bypass the damage pipeline segment. This could consist of installing flanges along the pipeline at about Stations 41+00 and 50+00 on which those pipeline materials could be attached for the bypass.

5.2.3 Liquefaction

As noted in Section 4.4, loose granular soils located below the groundwater table were encountered by Caltrans (2002). Those sediments are likely to have a potential to liquefy under seismic forces. Although the saturated section of the granular sediments is relatively thin, further assessments for liquefaction and/or lateral spreading should be performed during design-level studies. If liquefaction is estimated to pose a risk to the pipeline, then mitigations should be evaluated to reduce those risks.

5.2.4 Expansive Soils

Soils with low to high expansion potentials were reported in the project area (NRCS, 2019), as discussed in Section 4.5. It is unknown whether soils with a high expansion potential will be present along the proposed pipeline alignment; however, due to the depths of the proposed pipeline, it is our opinion that those soils will have a low potential to adversely impact the pipeline. However, design-level geotechnical studies should evaluate whether highly expansive soils are present and provide recommendations for project design and construction if those soils are encountered.

5.2.5 Corrosive Soils

NRCS (2019) and Caltrans (2002) identify soils in the project area as being corrosive to severely corrosive to ferrous metals. We recommend that soil chemistry tests be performed during design-level geotechnical studies and tested for sulfate and chloride contents, pH, and resistivity to evaluate the degree of corrosion potential that alignment soils pose to concrete and ferrous metals. Results of those tests might warrant a corrosion engineer's involvement to mitigate corrosion on the proposed system.

5.3 GROUNDWATER

Relatively shallow groundwater with depths of eleven feet was encountered in explorations at Rincon Creek. Shallow groundwater should be anticipated along portions of the alignment underlain by Young Alluvium (Qya) and Intermediate Alluvium (Qia) and could be locally encountered along other portions of the proposed pipeline alignment. Explorations performed during design-level studies should refine the anticipated depths to groundwater along the alignment.

Groundwater elevations will fluctuate over time. The depth to groundwater can vary throughout the year and from year to year. Intense and long duration precipitation, modification of topography, and cultural land use changes along surrounding properties, such as irrigation, water well usage, on site waste disposal systems, utility leakage, and water diversions can contribute to fluctuations in groundwater levels. Localized saturated conditions or perched groundwater conditions near the ground surface could be present during and following periods of heavy precipitation or if on-site sources contribute water.

5.4 EXCAVATABILITY

Drill holes reviewed were advanced for geotechnical studies at Rincon Creek using hollow-stem auger drilling methods. In explorations at Bridge 05-SB-0316, loose to dense/soft to hard sediments were encountered and some soils contained gravel, cobbles, and possibly boulders. Practical refusal was not reported for explorations at that bridge. Practical refusal was encountered within cobble and boulder laden sediments at Bridge No. 05-SB-0317. It is our opinion, based upon preliminary data reviews, that the soils along the proposed pipeline alignment are generally excavatable using conventional heavy grading equipment except in areas where high concentrations of boulder might be encountered, such as along Rincon Creek. In those areas, heavy grading equipment can anticipate having moderate to difficult excavation conditions due to the large rock materials in the presence of relatively shallow groundwater. The presence of cobbles and boulders could pose challenging excavation conditions and should be further assessed during design-level services.

5.5 TEMPORARY SLOPES

Based on information presented by studies referenced within this report, the soils likely to be encountered during construction of the proposed pipelines should conform to Cal/OHSA Type B soils. OSHA soil classification typing includes the following:

OSHA SOIL TYPE DETERMINATIONS	
Stable Rock	Natural solid mineral matter that can be excavated with vertical sides and remain intact while exposed. It is usually identified by a rock name such as granite or sandstone. Determining whether a deposit is of this type may be difficult unless it is known whether cracks exist and whether or not the cracks run into or away from the excavation.
Type A Soils	Cohesive soils with an unconfined compressive strength of 1.5 tons per square foot (tsf) (144 kPa) or greater. Examples of Type A cohesive soils are often: clay, silty clay, sandy clay, clay loam and, in some cases, silty clay loam and sandy clay loam. (No soil is Type A if it is fissured, is subject to vibration of any type, has previously been disturbed, is part of a sloped, layered system where the layers dip into the excavation on a slope of 4 horizontal to 1 vertical (4H:1V) or greater, or has seeping water.
Type B Soils	Cohesive soils with an unconfined compressive strength greater than 0.5 tsf (48 kPa) but less than 1.5 tsf (144 kPa). Examples of other Type B soils are: angular gravel; silt; silt loam; previously disturbed soils unless otherwise classified as Type C; soils that meet the unconfined compressive strength or cementation requirements of Type A soils but are fissured or subject to vibration; dry unstable rock; and layered systems sloping into the trench at a slope less than 4H:1V (only if the material would be classified as a Type B soil).
Type C Soils	Cohesive soils with an unconfined compressive strength of 0.5 tsf (48 kPa) or less. Other Type C soils include granular soils such as gravel, sand and loamy sand, submerged soil, soil from which water is freely seeping, and submerged rock that is not stable. Also included in this classification is material in a sloped, layered system where the layers dip into the excavation or have a slope of four horizontal to one vertical (4H:1V) or greater.
Layered Geological Strata	Where soils are configured in layers, i.e., where a layered geologic structure exists, the soil must be classified on the basis of the soil classification of the weakest soil layer. Each layer may be classified individually if a more stable layer lies below a less stable layer, i.e., where a Type C soil rests on top of stable rock.

The following maximum slope inclinations are allowed based upon OSHA soil types:

OSHA MAXIMUM ALLOWABLE SLOPES	
Soil Type	**Slope Ratio[1]**
Stable Rock	Vertical
Type A	¾:1
Type B	1:1
Type C	1½:1
[1] – horizontal : vertical	

Because of the presence of granular soils, unshored trenches should be anticipated to be sloped at inclinations no greater than 1:1 (horizontal to vertical) unless shoring is provided.

Future geotechnical exploration for this project could identify if other soil types are present and, hence, potentially steeper allowable trench slopes.

Based on the drill hole logs reviewed site during this preliminary study, it is anticipated that loose, running, raveling, and/or flowing conditions could be encountered in excavations or trenches. If such conditions are encountered during construction, inclinations of unshored slope excavations may not stand exposed at the slope ratios noted above for OSHA Soil Types. In such situations, proposed excavations in those areas could fail and expand in an area much larger than the proposed width unless the excavation and/or trench is shored and adequately supported. Future geotechnical studies should evaluate these conditions and provide recommendations for methods to reduce risks associated with such soils.

5.6 RE-USE OF ON-SITE SOIL MATERIALS

Based on the reviewed drill hole logs and laboratory data collected for this study, it is our preliminary opinion that most of the near-surface soils encountered at the site should be useable for backfill materials within the trench zone (that portion of the pipeline trench above the pipe zone) but are unsuitable for use within the pipe zone (that portion of the pipeline trench from six inches below to six inches above the pipeline). Some over-size rock (greater than 3 inches in maximum dimension) may require screening from native soils for use in trench zone backfill.

5.7 ALLOWABLE FOUNDATION BEARING PRESSURES

It is assumed that all foundations for the proposed vaults or other structures will rest entirely on undisturbed natural soils or rock materials as discussed above. A preliminary allowable bearing pressure of 1,500 psf for isolated and continuous footing elements can be used for preliminary design and cost-estimating purposes for this project. Those preliminary allowable bearing pressures can be proportioned for dead loads plus probable maximum live load.

5.8 PRELIMINARY PIPELINE DESIGN FACTORS

5.8.6 External Loads on Buried Pipelines

External loads on buried pipes will consist of loads due to the overlying earth materials, loads due to construction activities, loads due to traffic, and other post construction land uses. It is recommended that the pipe be designed to resist the imposed loads with a factor of safety and an amount of deflection, as recommended by the pipeline manufacturer. The earth loads on the pipe can be estimated using formulas developed by Marston (1930) and Spangler (1982). When using Marston's formulas, a preliminary unit weight of the backfill materials can be assumed to be 125 pcf.

The pipe may be subject to surcharge pressures due to construction activities and traffic. Those surcharge pressures should be considered in the design of the pipe.

5.8.7 Modulus of Soil Reaction (E')

Flexible and semi-rigid pipes are typically designed to withstand a certain amount of deflection from applied earth loads. Those deflections can be estimated with the equations developed by Spangler (1982). The modulus of soil reaction (E') values for the project were estimated using relations of Howard (1996). The table below presents E'_b values, which are recommended E' values for pipe zone backfill materials (pipe zone backfill). The recommended E'_b values presented in the table below apply to the initial backfill materials along the sides of the pipe at the recommended level of compaction.

MODULUS OF SOIL REACTION FOR PIPE ZONE BACKFILL MATERIALS (E'_B)

Soil Type	Depth of Burial	Recommended E'_b (psi)
Pipe Bedding and Pipe Embedment (clean crushed rock or sand)	5'	1,000
	10'	1,500
	15'	1,600
	15'+	1,700
Soil-Cement Slurry (backfilled within 2 days of placement)	Not Applicable	2,500

Where the zone of backfill beside the pipe is less than five times the pipeline diameter, the E'_b values above may not be applicable and the constrained soil modulus E'_n will affect flexible pipe design. E'_n corresponds to the E' value for the natural trench wall soils. The actual lateral soil modulus at the pipe depth will lie somewhere in between E'_b and E'_n depending on the trench width. Based on the data presented in drill hole logs reviewed for this study, the following preliminary E'_n values are recommended for use for planning-level design and cost estimating purposes:

PRELIMINARY E'_n VALUES FOR ON-SITE MATERIALS

Stationing		Earth Material[1]	E'_n Value (psi)
From	To		
10+00	23+00	Qia	600
23+00	57+50	Qoa	1,200
57+50	85+00	Qya	400

[1] – See Plate 3.1 and 3.2

For trench widths less than five times the diameter of the pipe, the composite design E' (E'_b and E'_n) may be calculated using the Soil Support Combining Factors (S_c) presented in the

table below, where B_d is the trench width at pipe springline and D is the diameter of the pipe.

SOIL SUPPORT COMBINING FACTORS (S_C)						
E'_n/E'_b	$B_d/D=1.5$	$B_d/D=2.0$	$B_d/D=2.5$	$B_d/D=3.0$	$B_d/D=4.0$	$B_d/D=5.0$
0.1	0.15	0.30	0.60	0.80	0.90	1.00
0.2	0.30	0.45	0.70	0.85	0.92	1.00
0.4	0.50	0.60	0.80	0.90	0.95	1.00
0.6	0.70	0.80	0.90	0.95	1.00	1.00
0.8	0.85	0.90	0.95	0.98	1.00	1.00
1.0	1.00	1.00	1.00	1.00	1.00	1.00
1.5	1.30	1.15	1.10	1.05	1.00	1.00
2.0	1.50	1.30	1.15	1.10	1.05	1.00
3.0	1.75	1.45	1.30	1.20	1.08	1.00
>5.0	2.00	1.60	1.40	1.25	1.10	1.00

Source: "Pipeline Installation," A. Howard, 1996

The corresponding composite design E' can be calculated by selecting the appropriate S_c value from the table above and multiplying the appropriate E'_b value by S_c, as noted below:

$$E'=E'_b(S_c)$$

5.8.8 Thrust Resistance

Where the proposed pipeline changes direction abruptly, resistance to thrust, if needed, can be provided by mobilizing frictional resistance between pipe and the surrounding soil, by use of a thrust block, by use of restrained pipe joints, or by a combination of the above.

To design thrust resistance by mobilizing frictional resistance, a preliminary coefficient of lateral earth pressure at-rest value, K_o, of 0.5 can be used in conjunction with a coefficient of friction of 0.20 for PVC or HDPE pipelines. Those frictional values include a factor of safety of 1.5 and are based on the assumption that a sand with a sand equivalent (SE) of 28 or greater will be placed within the pipe zone.

5.8.9 Dewatering

As noted in Sections 3.2.3 and 5.3, groundwater can be expected at trench excavation depths along portions of the proposed pipeline alignment. Local dewatering, if needed, can probably be accommodated through the use of in-trench trash, sump, or other pumps. This should be further evaluated during design-level geotechnical studies for the project.

6 ADDITIONAL SERVICES

This report and its associated recommendations were intended to assist WWE during preliminary design and cost estimating phases of the project. This report is not sufficient for design-level geotechnical engineering on the proposed project and we recommend that additional exploration, laboratory testing, and geotechnical engineering be performed to provide those design-level geotechnical services to WWE for the project.

7 LIMITATIONS

This report has been prepared in substantial accordance with the generally accepted geotechnical engineering practice, as it existed in the site area at the time our services were rendered. No other warranty, either express or implied, is made.

Conclusions and recommendations contained in this report were based on the reported conditions encountered during our review of selected, available, published information collected during this study and from our site observations. No subsurface exploration or laboratory testing was performed by BAJADA to prepare this report. This study is applicable only to those project features described herein (see Section 1.1 – Project Understanding). Soil and rock deposits can vary in type, strength, and other geotechnical properties between reported points of observation and exploration. Additionally, groundwater and soil moisture conditions can also vary seasonally and for other reasons. Therefore, we do not and cannot have a complete knowledge of the subsurface conditions underlying the project area. The conclusions and recommendations presented in this report are based upon the findings at the points of exploration from other's studies, and interpolation and extrapolation of information between and beyond the points of observation, and are subject to confirmation based on the conditions revealed by future geotechnical exploration and by construction.

The scope of services provided by BAJADA for this project did not include subsurface investigation and/or evaluation of toxic substances, or soil or groundwater contamination of any type. If such conditions are encountered during site development, additional studies may be required. Further, services provided by BAJADA for this project did not include the evaluation of the presence of critical environmental habitats or culturally sensitive areas.

This report may be used only by our client and their agents and only for the purposes stated herein, within a reasonable time from its issuance. Land use, site conditions, and other factors may change over time that may require additional studies. In the event significant time elapses between the issuance date of this report and construction, BAJADA shall be notified of such occurrence in order to review current conditions. Depending on that review, BAJADA may require that additional studies be conducted and that an updated or revised report is issued.

Any party other than our client who wishes to use all or any portion of this report shall notify BAJADA of such intended use. Based on the intended use as well as other site-related factors, BAJADA may require that additional studies be conducted and that an updated or revised report be issued. Failure to comply with any of the requirements outlined above by the client or any other party shall release BAJADA from any liability arising from the unauthorized use of this report.

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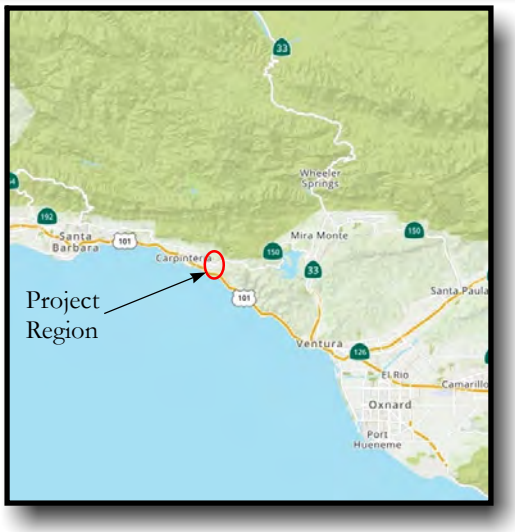


Base maps from Bing Maps. Scale undetermined.

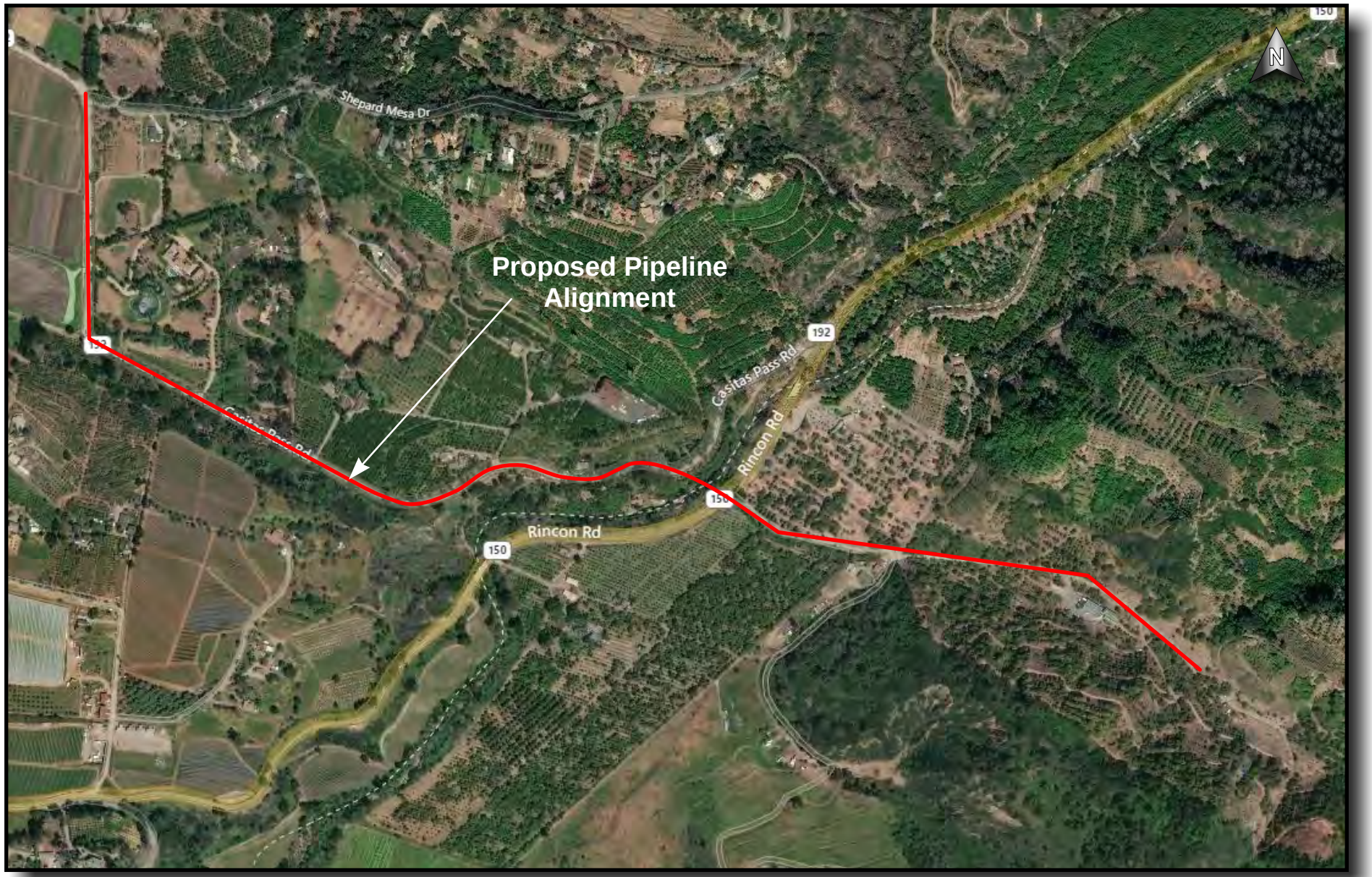
SITE LOCATION MAP

Santa Barbara-Ventura Tie-In Pipeline
Casitas Municipal Water District
Water Works Engineers
Santa Barbara & Ventura Counties, CA

Plate No. 1

BAJADA Geosciences, Inc.

Project no. 1901.0101



PROPOSED PIPELINE ALIGNMENT

Santa Barbara-Ventura Tie-In Pipeline
Casitas Municipal Water District
Water Works Engineers
Santa Barbara & Ventura Counties, CA

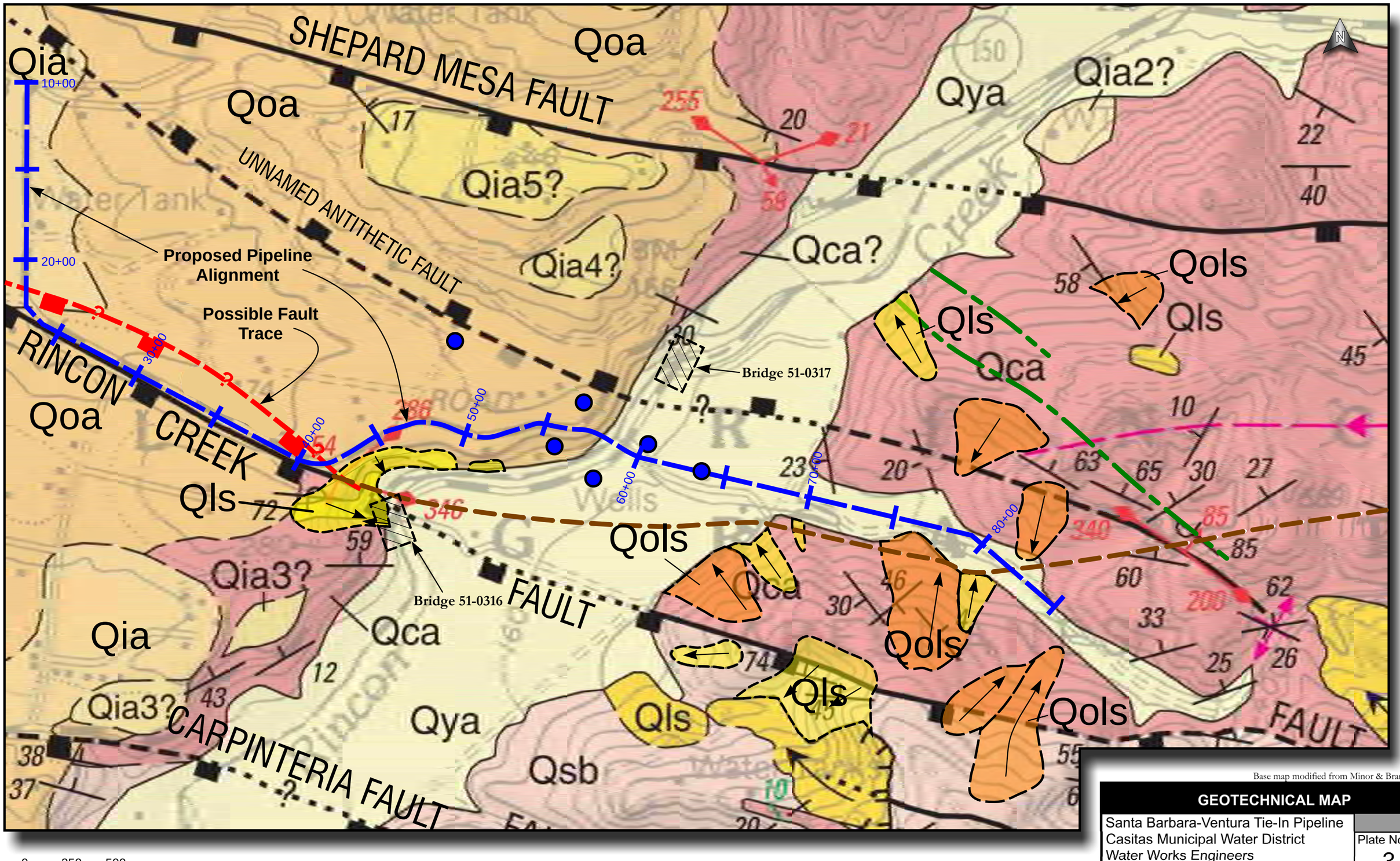
Plate No. 2

BAJADA Geosciences, Inc.

Project no. 1901.0101

Base imagery fron Bing Maps

Scale undetermined



0 250 500

Scale: 1”=500’
1:6,000

See Plate 3.2 for Key to Terms and Symbols

Base map modified from Minor & Brandt (2015)

GEOTECHNICAL MAP

Santa Barbara-Ventura Tie-In Pipeline
Casitas Municipal Water District
Water Works Engineers
Santa Barbara & Ventura Counties, CA

Plate No. 3.1

BAJADA Geosciences, Inc.

Project no. 1901.0101

KEY TO TERMS AND SYMBOLS

Qya **Younger alluvium (Holocene)**—Poorly consolidated silt, sand, and gravel deposits occupying valley floors and floodplains of modern drainages

Qaf **Alluvial fan deposits (Holocene and late Pleistocene?)**—Weakly to moderately consolidated silt, sand, and gravel forming variably dissected fans

Qia **Intermediate alluvial deposits, undifferentiated (late Pleistocene)**—Weakly consolidated gravel and lesser sand and silt that form weakly to moderately dissected stream and river strath terraces positioned above adjacent modern floodplains, and broad, low-relief, piedmont alluvial aprons. Along larger drainages terrace-forming intermediate alluvial deposits are subdivided into six age groupings based chiefly on relative levels (elevations) of terraces, with the oldest terraces being the most elevated:

Qia1 **Intermediate alluvial deposits, terrace level 1**

Qia2 **Intermediate alluvial deposits, terrace level 2**

Qia3 **Intermediate alluvial deposits, terrace level 3**

Qia4 **Intermediate alluvial deposits, terrace level 4**

Qia5 **Intermediate alluvial deposits, terrace level 5**

Qia6 **Intermediate alluvial deposits, terrace level 6**

Qoa **Older alluvial deposits (late? and middle? Pleistocene)**—Moderately consolidated, stratified sand and sandstone, gravel, conglomerate, and breccia, and rare interbeds of clay, silt, and mudstone composing erosional remnants of older alluvial fans shed from the Santa Ynez Mountains

Qmt **Marine-terrace deposits (late Pleistocene)**—Sequence of basal marine, weakly to moderately consolidated, variably stratified, fossiliferous gravel, sand, and silt deposited in neritic, intertidal, beach, and estuarine environments and overlying nonmarine eolian sand and silt, alluvial gravel, and colluvial deposits. Marine-terrace deposits rest on elevated wave-cut platforms and form single terraces or flights of terraces

Qdf **Debris-flow deposits (Holocene and late Pleistocene?)**—Massive, weakly consolidated rock-debris breccia derived from rock units exposed upslope

Qls **Landslide deposits (Holocene and late? Pleistocene)**—Deposits of diverse slope-movement processes ranging from poorly sorted, disrupted mixtures of rock fragments and soil to relatively intact bedrock slide blocks

Qca **Casitas Formation (middle? Pleistocene)**—Nonmarine, moderately to well-consolidated siltstone and silt, multi-colored sandstone and sand, and conglomerate and gravel deposited mainly as alluvium likely shed off of the Santa Ynez Mountains and other nearby uplands. Unit resembles, and may be at least partly correlative with, the older alluvial deposits (Qoa) and the conglomerate of Ojai (Qco)

Qco **Conglomerate of Ojai (middle? Pleistocene)**—Nonmarine, moderately to well-consolidated conglomerate and gravel, sandstone and sand, and subordinate siltstone and silt deposited mainly as alluvium likely shed off of the Santa Ynez Mountains and other nearby uplands. Unit resembles, and may be at least partly correlative with, the older alluvial deposits (Qoa) and the Casitas Formation (Qca)

Qsb **Santa Barbara Formation (middle and early Pleistocene)**—Marine, pale-gray, -yellow, and -tan, friable, bioturbated and massive sandstone; includes subordinate interbeds and intervals of shale, siltstone, and silty to clayey sandstone. Contains diverse assemblage of marine invertebrate fossils. Contains rare conglomeratic beds and lenses, and uppermost part of unit locally interfingers with nonmarine conglomerates of the Casitas Formation (Qca)

Contact—Long-dashed where approximately located; short-dashed where inferred, dotted where concealed, queried where identity or existence is questionable; contact attitude (green tic) shows direction and angle of dip

Fault—Long-dashed where approximately located, short dashed where inferred, dotted where concealed, queried where uncertain; small red arrow shows direction and angle of dip, red diamond-headed arrow shows bearing and rake of slickenlines and inferred slip direction of hanging-wall block

Normal fault reactivated as strike-slip fault—Long-dashed where approximately located, short dashed where inferred, dotted where concealed; ball and bar on apparent downthrown side (note that this only applies to the Arroyo Parida Fault in and west of Santa Ana Valley); opposing arrows indicate sense of younger strike-slip movement

Strike-slip fault—Long-dashed where approximately located, short dashed where inferred, dotted where concealed; opposing arrows indicate sense of strike-slip component of movement

Thrust fault—Sawteeth on upthrown side, short dashed where inferred, dotted where concealed

Reverse fault—Long-dashed where approximately located, short dashed where inferred, dotted where concealed, queried where identity or existence is questionable; rectangles on upthrown side

Anticline—Long-dashed where location approximate, short dash where inferred, dotted where concealed, queried where identity or existence is questionable; large arrowhead shows direction of plunge

Syncline—Long-dashed where location approximate, short dash where inferred, dotted where concealed, queried where identity or existence is questionable; large arrowhead shows direction of plunge

Landslide scarp—Hachures point down scarp

Landslide movement—Arrows show direction of downslope movement

Landslide internal contact

Marine-terrace shoreline angle—Approximately located based on subtle to strong topographic steps of terrace surface; locally coincides with contact between Qmt and older units

Horizontal bedding

Overturned bedding—Showing strike and dip

Inclined bedding—Showing strike and dip

Inclined bedding—Showing approximate strike and dip

Inclined bedding, questionable—Showing strike and dip of bedding

Oil seep

MODIFICATIONS TO MINOR & BRANDT (2015) MADE DURING THIS STUDY

Qols **Older Landslide Deposits** - Landslide deposits observed in aerial photographs that exhibit weathered and poorly expressed geomorphology implying older age.

Water Well - as noted on topographic maps or Geotracker/GAMA

Lineation - observed on aerial photographs, possibly indicative of faulting, bedding, or other discontinuity

80+00 **Stationing** in feet.

Possible trace of Rincon Creek fault

USGS/CGS fault catalogue trace of Rincon Creek fault

Modified from Minor & Brandt (2015)

GEOTECHNICAL MAP

Santa Barbara-Ventura Tie-In Pipeline
Casitas Municipal Water District
Water Works Engineers
Santa Barbara & Ventura Counties, CA

Plate No. 3.2

BAJADA Geosciences, Inc.

Project no. 1901.0101

SOIL UNITS ALONG PIPELINE ALIGNMENT

Soil Unit No.	Soil Unit Name
Cb	Camarillo Variant, fine sandy loam
EaB	Elder Sandy Loam 2% to 9% slopes
GcA	Goleta Fine Sandy Loam, 0% to 2% slopes
MdF	Milpitas Stony Fine Sandy Loam, 30% to 50% slopes
MeC	Milpitas Stony Fine Sandy Loam, 2% to 9% slopes
MeD2	Milpitas-Positas Fine Sandy Loam, 9% to 15% slopes
MeE2	Milpitas-Positas Fine Sandy Loam, 15% to 30% slopes
MeF2	Milpitas-Positas Fine Sandy Loam, 30% to 50% slopes
OAG	Orthents, 50% to 75% slopes
AcC	Anacapa Sandy Loam, 2% to 9% slopes
GxG	Gullied Land
LkF	Lodo Rocky Loam, 30% to 50% slopes
LoD2	Los Osos Clay Loam, warm, 9% to 15% slopes
MoC	Mocho Loam, 2% to 9% slopes
ScG	San Benito Clay Loam, 50% to 75% slopes
SoE2	Sespe Clay Loam, 15% to 30% slopes
SoF	Sespe Clay Loam, 30% to 50% slopes
SwC	Sorrento Loam, 2% to 9% slopes

N

0 300 600

Scale: 1”=600’
1:7,200

SOILS MAP

Santa Barbara-Ventura Tie-In Pipeline
Casitas Municipal Water District
Water Works Engineers
Santa Barbara & Ventura Counties, CA

Plate No. 4

BAJADA Geosciences, Inc.

Project no. 1901.0101

Base map: 7.5’ USGS White Ledge Peak Quadrangle Topographic map. Soils data from NRCS (2019)

Active	
Historic Displacement (last 200 years)	Holocene Displacement (last 11,700 years)
Potentially Active	**Inactive**
Late Quaternary Displacement (last 700,000 years)	Quaternary Fault (last 1.6 million years)

Base map from USGS Interactive Fault Map (2019)

Scale undetermined

REGIONAL FAULT MAP

Santa Barbara-Ventura Tie-In Pipeline
Casitas Municipal Water District
Water Works Engineers
Santa Barbara & Ventura Counties, CA

Plate No. 5

BAJADA Geosciences, Inc.

Project no. 1901.0101

APPENDIX A

Subsurface Exploration

State of California Business, Transportation and Housing Agency

Memorandum

To: SHANNON POST, Chief
Bridge Design Central

Date: October 15, 2002

File: 05-SB-150-1.6/R2.6
(1.0/R1.6 PM)
05-282801
Roadway Realignment
Bridge No. 51-0316

From: **DEPARTMENT OF TRANSPORTATION**
DIVISION OF ENGINEERING SERVICES
GEOTECHNICAL SERVICES

Ref:
1) *Preliminary Geologic Recommendations and Resource Estimate for Advance Planning Study* for 05-SB-150-1.6/2.6, EA 05-282801, Rincon Creek Bridge, Bridge No. 51-0316, by Office of Structure Foundations dated June 29, 2000,
2) *Seismic Design Recommendations* for 05-SB, VEN-150-1.6/2.6, EA 05-282801, Rincon Creek Br. (Replace), Bridge No. 51-0316, by Office of Geotechnical Earthquake Engineering dated June 9, 2000,
3) *Foundation Investigation* for 05-SB-150-1.1, EA 05-282801, Rincon Creek Bridge, Bridge No. 51-0316, by Office of Structural Foundations dated November 28, 1995.

Subject: Preliminary Foundation Report

This memo is in response to a Request for Foundation Reports memo from the Office of Structure Contract Management dated March 27, 2002. Since the time of this request it is our understanding that the structures aspect of this project has been brought back in-house and the time line for PS&E has been extended from its original proposed date of May 15, 2003 to April 1, 2004. This memorandum presents our preliminary foundation recommendations (PFR) for the above mentioned project.

In 1996 a completed set of plans was produced for the realignment of Route 150 between PM 1.0 and R1.6. It is our understanding that due to permitting issues this project did not proceed to construction and a slightly different alignment was proposed at the west end of the project to accommodate permitting issues. It was proposed in the 1996 set of plans to replace the two one-lane bridges within the project limits, Bridge Numbers 51-140 and 51-141. The revised alignment proposes both bridges be replaced but only the bridge at the west end of the project, Bridge No. 51-140 is proposed for a different location than what is shown in the 1996 plans. The 1996 plans show the proposed bridge, Bridge No. 51-0316, 20 to 26 meters downstream of the existing bridge structure. The new bridge, Bridge No. 51-0316, is currently proposed to be constructed in the same location as the existing bridge. The new bridge will be wider to accommodate two-way traffic and a few meters longer. Additional borings and field work have been conducted along with a review of all the preexisting work referenced above to develop the recommendations provided herein. It should

be noted that no supplemental work has been conducted for the proposed bridge, Bridge No. 51-0317 at the east end of the project since the proposed bridge location has not changed from the 1996 plans.

Site Investigation

A foundation investigation was conducted in June of 2002 by Geotechnical personnel to supplement the 1996 bridge foundation investigation. It was conducted for the purpose of determining the existing site conditions, subsurface stratigraphy, subsurface water levels, corrosion potential, and the foundation conditions. Two 94 millimeter diameter mud rotary borings (Borings B1-02 and B2-02) were drilled at the project site. B1-02 was drilled at the northeast end of the existing bridge structure to a depth of 27.4 meters and B2-02 was drilled at the southwest end of the existing bridge structure to a depth 25.5 meters. Standard Penetration Tests (SPT), ASTM Test Method 1586, and continuous coring with a wireline 94 millimeter system was conducted during the drilling operations. The SPT tests were conducted at selected intervals for soil classification and density determination. Open Standpipe piezometers were constructed in both borings for determination of subsurface piezometric water levels. Boring B1-02 was cased with slotted PVC pipe and backfilled with #8 sand to within 3 meters of the ground surface. The top 3 meters was cased with solid PVC pipe and backfilled with bentonite chips. Boring B2-02 was cased with slotted PVC pipe and backfilled with #8 sand to within 6 meters of the ground surface. The top 6 meters was cased with solid PVC pipe and backfilled with bentonite chips. A copy of the boring logs along with a legend is included as Attachment 4 and 5. A copy of the Log of Test Borings from the 1996 plans for Bridge No. 51-0316, Attachment 6, is also attached for reference. It should be noted that the proposed bridge structure that is shown on the 1996 Log of Test Borings is 20 to 26 meters downstream of the current revised proposed bridge location.

Geology

The dominant physical feature of the region is the Santa Ynez Mountain Range, which lies to the north of the project site. Most of the structural trends in the area are oriented east-west with the Rincon Creek thrust fault zone located with the project limits. The lowlands are structural lows and the hills are anticlines or upfaulted blocks.

The project site can be characterized as varying depths of overburden overlying the Plio-Pleistocene continental deposits of Casitas Formation. The Casitas formation consists of two members. The lower member, which was found below the roadbed elevation, is predominantly gray to reddish clay, silt, and sand in fairly regular beds. The upper member, which is exposed in the cuts just westbound of the proposed structure, is crudely bedded flanglomerate, cobble, gravel, and pebble silty sand.

The borings that were drilled at either end of the existing bridge structure revealed the depth of the Casitas formation from the existing roadbed elevation. The overburden soils encountered in the borings varied in depth from 4.6 to 5.5 meters in Borings B1-02 and B2-02. The overburden soils encountered in the borings were generally loose to medium dense silty and clayey sands with gravels and cobbles encountered from a depth of 2.5 meters to the top of the Casitas formation.

Groundwater

Groundwater was encountered during the field investigation at a depth 3.5 meters in boring B1-02 and 3.8 meters in boring B2-02 below the existing ground surface. At the north end this would equate to a groundwater elevation of 33.8 meters and at the south end of the existing structure this would equate to a groundwater elevation of 33.1 meters. As is shown on the attached borings logs, Attachment 5, these water levels were encountered during July of 2002. It is very likely that these groundwater elevations will rise during the winter and spring. Rincon Creek runs year round and the creek flow line is approximately at an elevation 33 meters at the existing bridge. There is no information about the surface water in the creek channel but due to the porous nature of the overburden soils adjacent to the creek it is reasonable to assume the groundwater may reach the height of the highest anticipated level in the creek. Groundwater levels will continue to be monitored through the winter months and into next summer.

As-Built Data

This bridge was constructed in 1927 and no As-Built data was available. Contract Plans dated October, 1924, Document No. 50001024, were located but there were no construction notes or as-built notes on the contract documents.

Seismic Study and Liquefaction Evaluation

Seismic design recommendations have been developed for the proposed bridge by the Office of Earthquake Engineering and their findings are presented in the above referenced report.

Scour Evaluation

An in-depth search for existing scour potential information was conducted. Several references to scour have been stated in the previous reports referenced above. In the 1995 *Foundation Investigation* report the local scour was estimated to extend to an elevation of 29.9 meters (98 feet) which is approximately 7.5 meters below the existing roadbed grade and 2.8 meters into the Casitas formation. Based on a discussion with Mark Palmer in Geotechnical Services it is possible for local scour to extend into the Casitas formation. Although this information is provided in the Foundation report it was not generated from Geotechnical Services. Most likely this information came from the Office of Hydraulics in the Division of Engineering Services. Hydraulics did not have any record of making this recommendation so it was not possible to verify this information for the proposed bridge location.

In the 2000 *Preliminary Geologic Recommendations* report no estimate of scour is provided. Instead, it is requested that scour information be provided to this office at the time of the request for foundation recommendations.

Several reports were also found in the preliminary files held by the District 5 design engineer David Beard. A report PR No. 17 dated June 24, 1987 stated that the bottom of the existing footing was at 32.4 meters (106.4 feet) and that 0.6 meters of scour was noted in the channelbed during April of 1987. A second report, Preliminary Report by SS Wang dated November 15, 1995, stated that the abutment scour may be negligible and that contraction scour is calculated to be 0.5 meters based on FHWA HEC 18 equation.

The pile cap elevation will be dependent upon the depth of scour at the bridge location. The pile cap should be constructed at a depth below the anticipated depth of scour and the pile cap construction will require an excavation to the bottom of the pile cap. If the scour depth is confirmed to extend to an elevation of 29.9 meters, then construction of the pile cap below the groundwater surface should be expected since groundwater was found at an elevation of 33.8 meters even in July of normal rain year. The hydraulic conductivity of the material is unknown at this time but it is anticipated that the material between the elevations of 29.9 meters and 33.8 meters may be very porous due to the quantity of gravel and cobbles that were encountered during drilling of this zone. If an estimate of the hydraulic conductivity of the material surrounding the proposed excavation is desired for constructability purposes please state this specifically in the Foundation Report request along with the scour potential information. Supplemental drilling, testing, and analysis will be required to estimate the hydraulic conductivity.

Corrosion Evaluation

Samples of several of the encountered soil strata were collected for corrosion testing during the drilling operations of borings B1-02 and B2-02. The sample locations and the test results are shown below with the depth column referring to the depth that the sample was obtained below the existing ground elevation. The water sample was collected from a piezometer that was placed in boring B2-02.

SIC Number	Boring	Material Type	Depth m	Elevation m	pH	Resistivity Ω-cm	Sulfate ppm	Chloride ppm
C421534	B2-02	Water	4	32.9	7.6	640	340	94
C421535	B1-02	Soil	0.3 to 0.6	37 to 36.7	7.5	2240	-	-
C421536	B1-02	Soil	3.5 to5.0	33.8 to 32.3	7.5	620	1000	110
C421537	B2-02	Soil	14 to 15.2	22.9 to 21.7	8.2	1570	-	-
C421538	B2-02	Soil	5 to 6	31.9 to 30.9	8.5	1670	-	-
C421539	B2-02	Soil	20 to 21.3	16.9 to 15.6	8.4	1440	-	-

Table 1: Corrosion Results

CalTrans defines a corrosive material as an area where the soil and water has a minimum resistivity of less than 1000 ohm-cm and either contains more than 500 ppm of chlorides, more than 2000 ppm of sulfates, or has a pH of 5.5 or less. According to this criteria none of the tested soil shown above is considered corrosive. The corrosion results were forwarded to Corrosion Technology Branch for a review. The result of their review is attached as Attachment 7.

Preliminary Foundation Recommendations

It is proposed to construct a single span bridge structure (Bridge No. 51-0316) over Rincon Creek. Design loads are unknown at this time since the structure has changed design teams and it remains unassigned at the time of writing this report. It was assumed that the structure loads would not vary much from the proposed 1996 structure since the structure is approximately the same dimensions. For the 1996 bridge structure the design load is shown as 35 tons; therefore it was proposed to use 70 ton piles. The following foundation types were considered for the support of the bridge structure.

1. H-Piles: Steel H-piles were the proposed foundation type in the 1996 plans and is still considered a viable option. Hard driving should be anticipated since the stratigraphy consists of hard clay layers and very dense sand layers to depth. Depending upon the elevation at which the pile cap is placed, the H piles may encounter a dense layer of cobbles and gravels that was observed within 5.5 meters of the existing ground surface. Driving shoes may be required to protect the pile tips. H-piles are vulnerable to corrosion especially in areas where the H pile has been damaged or deflected by large obstructions. As per the Corrosion Technology Branch, no corrosion mitigation was found necessary for driven steel H-piles. Compared to other pile types, H-piles provide limited lateral or uplift capacity. Additional piles, thicker structural section area, and larger pile caps may be required to resist the design lateral loading. H-piles tend to run when installed in environments where water is present. If the piles run, lugs may be added to the piles in order to achieve bearing at a specified tip elevation.

2. CIDH Piles: CIDH piles can be considered a viable option at this site CIDH piles have high bearing and lateral capacity but constructability issues should be considered very strongly. As with the H-piles the lens of dense cobbles and gravels may be encountered within 5.5 meters of the existing ground surface and whether this lens of cobbles and gravel will be a construction issue will depend upon the elevation of the pile cap. It is recommended to use CIDH piles with a diameter of 406 mm (24 inch) or larger.

   Due to the presence of groundwater at 3.5 meters below the existing ground surface, and the presence of cohesionless material in the Casitas Formation casing or slurry displacement construction methods may be required. Casing or slurry displacement will help prevent water from flowing into the drilled shaft and sand and gravel from caving or heaving. Wet method CIDH construction should be anticipated for this project site.

3. Open-ended Steel Pipe Piles/ CISS Piles: The following recommendation was provided in the above referenced 2000 *Preliminary Geologic Recommendations* report and is still considered valid:

   > Driven steel pipe piles may be used for supports at all support locations. CISS piles are suitable as a pile alternative for this site. Center relief drilling may be used if the pile reaches refusal before the specified tip elevation. CISS piles are suitable for sites that might require high lateral

capacity. In locations where groundwater may be encountered during construction slurry displacement may be required for installation of the piles.

Construction difficulties should be noted. If these piles are to be reinforced and because of the difficulty in cleaning and inspecting the installed shell, Alternative "W" pile is not recommended for this site. If CISS piles are selected for support, only large shells are recommended. If the shells are to be reinforced with steel cages and filled with concrete, drilling through the pipe may require maintaining a hydraulic head in the shell casing. If high groundwater level is encountered at the site, water/slurry pressure head may be required to be maintained in the steel shell above the anticipated potentiometric level of the groundwater to prevent soil blowout from occurring inside the steel shell. CISS piles with thick shells are suitable for sites that might require high lateral capacities.

Large CISS piles with diameter of 610 mm (24 in) or larger may be used for supports at this site. Large diameter CISS piles with pile extension may be used as a pile alternative for the pile cap. These piles may need to be designed for use in corrosive environment. It is recommended that CISS piles be used at the bents with multiple columns. Long single columns with large loads are not recommended. A single column bent with a large load tends to be very deep and is very hard to inspect for defects. Pile load testing will be required at this site. Loads greater than 8.9 MN (1000Tons) per pile are not recommended due to the difficulty in testing and verifying the loads in the field.

4. Driven Concrete Piles/Close ended Steel Pipe Piles: Due to the subsurface stratigraphy, driven concrete and steel pipe piles are not feasible for the bridge structure foundation. It is unlikely that the axial and lateral capacity would be achieved because it is likely that the piles would reach refusal on the layers of hard clay and very dense sand and gravel prior to reaching the specified pile tip elevation.

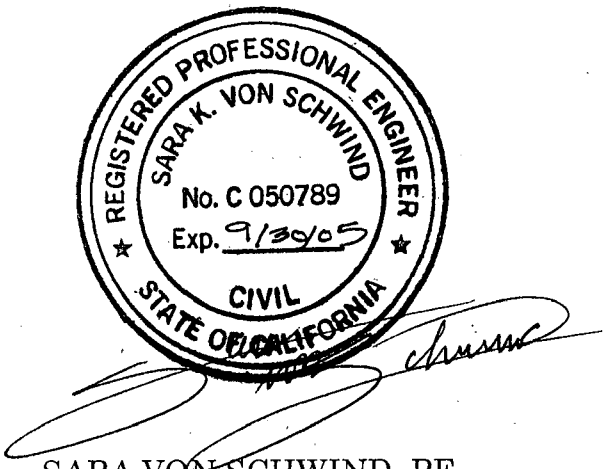
The above discussions are intended to provide preliminary interpretation of the site conditions for the purpose of cost estimates and preliminary planning. H-piles and CIDH piles are considered the most appropriate foundation types for the structure foundation. When the foundation demands are determined, final recommendations will be provided in the Foundation Recommendations Report.

Additional Field Work and Testing

The request for the Foundation Recommendations Report should include the bridge general plan, foundation design loads, the determined lowest elevation of potential scour, and the preferred bridge foundation type. Drilling of additional borings for the Foundation Recommendations Report is not

anticipated unless a more detailed understanding of the groundwater regime is desired. This may require two additional borings and time for testing and analysis to be conducted. Similar work may be necessary for bridge 51-0317.

If you have any questions or comments, please contact Sara von Schwind at (805) 549-3198 (CalNet: 629-3198) or Ron Richman at (805) 549-3385 (CalNet: 629-3385).



SARA VON SCHWIND, PE
Associate Materials & Research Engineer
Geotechnical Design – North
Branch D

Supervised by

RON RICHMAN, CHIEF, PE, CEG
Geotechnical Design – North
Branch D

Attachments (7)
c: RBibbens
DReeves
GSaunders
GDN.02

SKvS/skvs/1_1psfr1

List of Attachments

Attachment 1 ..... Location Map

Attachment 2 ..... Geology Map

Attachment 3 ..... Geology Map Legend

Attachment 4 .....Boring Log Legend

Attachment 5 .....Boring Logs

Attachment 6 .....1995 Log of Test Borings

Attachment 7 ..... Corrosion Review

Notes:

1. Unless Denoted Otherwise, All Dimensions For Measurement Of Length Shown On This Plan Are In Meters.

2. For Complete Right Of Way And Accurate Data, See Right Of Way Record Maps At District Office.

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
05	SB, Ven	150	1.5/2.7		

REGISTERED CIVIL ENGINEER

D. C. Beard
No. 52074
12-31-02
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans Metric

DATE	REVISED BY	DATE REVISED

CALCULATED/DESIGNED BY

CHECKED BY

PROJECT ENGINEER
D.C. Beard

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DEVELOPMENT

Santa Barbara Co
Ventura Co

102+06.367
97.736

Rincon Creek

Remove Concreted Rock Slope Protection

Conservation Easement

DENSE TREES

"LOL"
R=125 m
Δ=24°28'32"
T=27.112 m
L=53.397 m

7.6 m MBGR Terminal System (Type SRT)

Irrigation Crossovers

B2-02

+54 EB

+32 BB

+35 EB

Rincon

102

Permit To Enter

19 m MBGR Terminal Anchor Assembly (Type SFT)

Rincon Ck. Bridge No. 51-0316

"LOL"
R=125 m
Δ=63°24'40"
T=77.218 m
L=138.342 m

Match Line - See Sheet L-2

Exist R/W

N 33° 19' 58" E

44.093 100

N 53° 46' 2" E

64.8 m MBGR Terminal System (Type ET)

"LOL"
R=166 m
Δ=20°26'03"
T=29.739 m
L=58.846 m

Driveway 1
See Sheet C-2

ORCHARD

Santa Barbara Co
Ventura Co

Rincon Creek

LEGEND

Approximate Boring Location
B2-02

Scale: 1:500

LOCATION MAP
ATTACHMENT 1

LAST REVISION 10-10--02 TIME PLOTTED => 10-OCT-2002 10:24

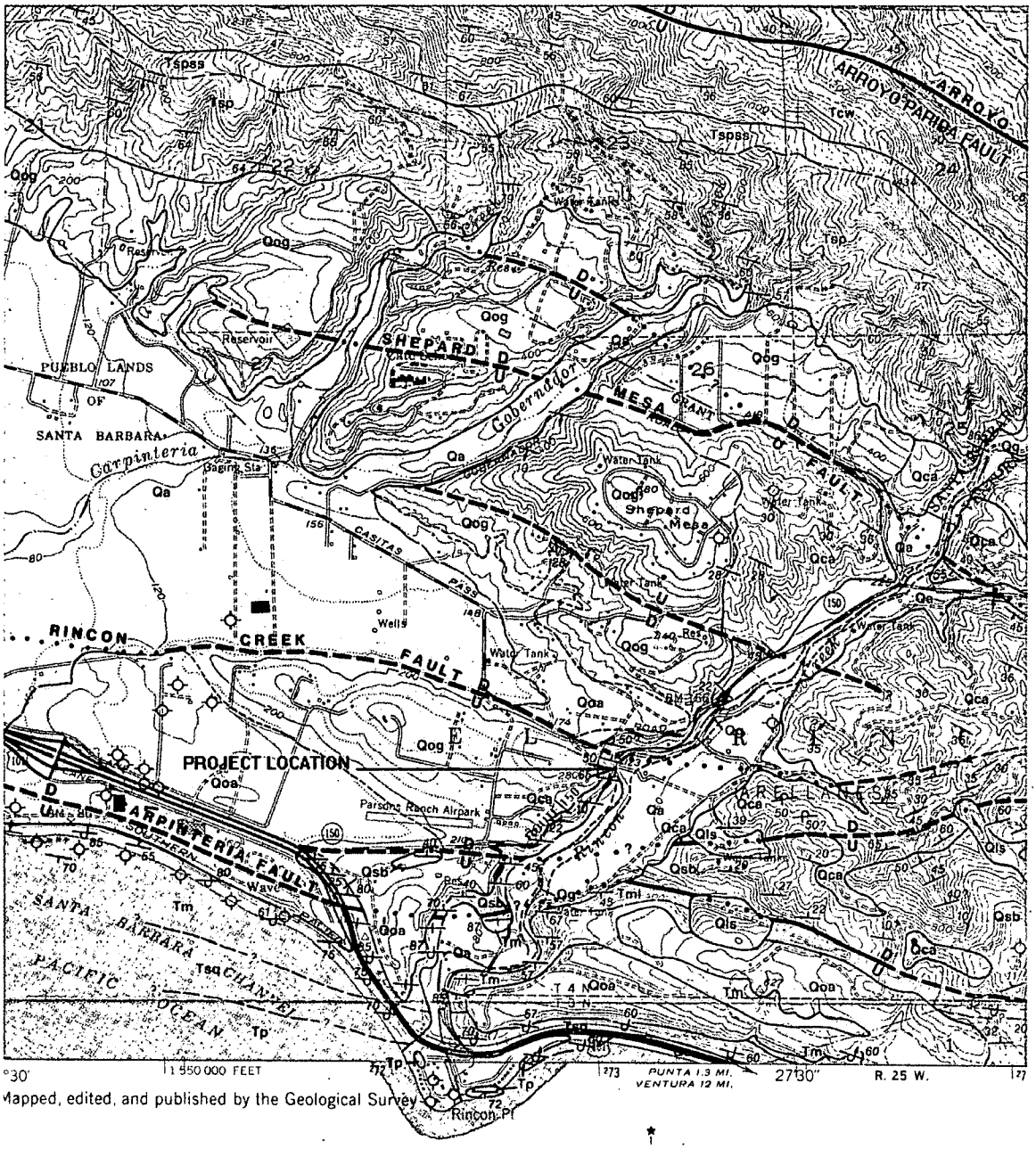
FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => sschwind
DGN FILE => rinconl_10_10.dgn

CU 05245

EA 282801

GEOLOGIC MAP
05-SB-150-1.0/R1.6 PM
05-282801



Mapped, edited, and published by the Geological Survey

SCALE 1:24 000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETRE

CONTOUR INTERVAL 40 FEET
DOTTED LINES REPRESENT 20-FOOT CONTOURS

QUADRANGLE LOCATION

GEOLOGIC MAP OF THE (IN PART)
WHITE LEDGE PEAK QUADRANGLE

SANTA BARBARA and VENTURA COUNTIES, CALIFORNIA

ATTACHMENT 2

GEOLOGIC MAP LEGEND

WHITE LEDGE PEAK QUADRANGLE

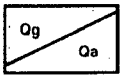
LEGEND

QUATERNARY

Holocene

?

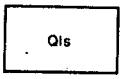
Pleistocene



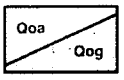
SURFICIAL SEDIMENTS

Qg *stream channel deposits, mostly gravel and sand*

Qa *alluvium; unconsolidated flood-plain deposits of silt, sand and gravel*



LANDSLIDE DEBRIS

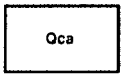


OLDER DISSECTED SURFICIAL SEDIMENTS

Qos *remnants of weakly consolidated older alluvial deposits of gravel, sand and silt*

Qog *cobble-boulder tan gravel and fanglomerate deposits composed largely of sandstone detritus*

UNCONFORMITY



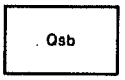
CASITAS FORMATION

nonmarine; early to middle(?) Pleistocene age

Qca *weakly consolidated alluvial deposits: gray to tan cobble-boulder gravel and gray to reddish sand and clay*

TERTIARY & QUATERNARY

Pliocene & Pleistocene



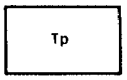
SANTA BARBARA FORMATION

shallow marine; early Pleistocene and latest Pliocene (?) age

Qsb *massive to bedded, poorly consolidated tan to yellow fossiliferous sand and silt*

UNCONFORMITY

Pliocene

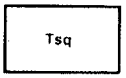


PICO FORMATION

marine; Pliocene age

Tp *massive to bedded gray siltstone, mudstone and minor tan sandstone; sandstone locally pebbly*

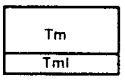
Miocene



SISQUOC SHALE

marine; late Miocene age

Tsq *light gray, silty shale or claystone, locally slightly siliceous and diatomaceous; Delmontian-Mohnian Stages*

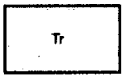


MONTEREY FORMATION
(MODELO FORMATION)

marine; early to late Miocene age

Tm *upper shale unit; white-weathering, thin bedded, hard, platy to brittle siliceous shale; Mohnian Stage*

Tml *lower shale unit: white-weathering, soft, fissile to punky clay shale with interbeds of hard siliceous shale and thin limestone strata; Luisian-Relizian Stages*



RINCON SHALE

marine; early Miocene age

Tr *poorly bedded gray clay shale and siltstone, locally concretionary; Saucesian and upper Zemorrian Stages*

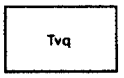
TERTIARY

Oligocene

?

?

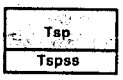
Eocene



VAQUEROS SANDSTONE

shallow marine; early Miocene age

Tvq *massive to thick bedded, light greenish-gray to tan, fine grained sandstone, locally calcareous; Zemorrian Stage*

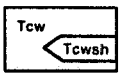


SESPE FORMATION

nonmarine; predominantly Oligocene age

Tsp *maroon, red and green silty shale or claystone with interbedded red sandstone; red arkosic sandstone and conglomerate at base*

Tspss *pink sandstone and minor red claystone*

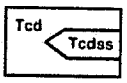


COLDWATER SANDSTONE

marine; late Eocene age

Tcw *hard, tan, bedded arkosic sandstone with minor interbeds of greenish-gray siltstone and shale, local oyster shell beds common in upper part; Narizian Stage*

Tcwsh *greenish-gray siltstone and shale with occasional interbeds of tan sandstone*

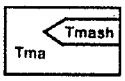


COZY DELL SHALE

marine; late Eocene age

Tcd *dark gray, argillaceous to silty micaceous shale with minor light gray to tan arkosic sandstone; Narizian Stage*

Tcdss *light gray to tan arkosic sandstone with minor interbeds of gray micaceous shale*

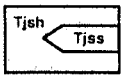


MATILIJA SANDSTONE

marine; middle to late Eocene age

Tma *hard, thick bedded, tan to mottled light greenish-gray arkosic sandstone with thin partings to thick interbeds of gray micaceous shale; lower Narizian (?) and upper Ulatisian (?) Stages*

Tmash *gray micaceous shale with minor tan sandstone interbeds*



JUNCAL FORMATION

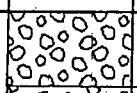
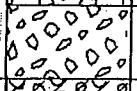
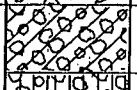
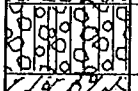
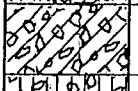
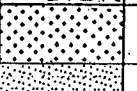
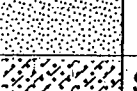
marine; early to middle Eocene age

Tjsh *dark gray micaceous shale with minor thin interbeds of hard, gray-white to tan arkosic sandstone; lower Ulatisian(?) to upper Penutian(?) Stages*

Tjss *hard, gray-white to tan arkosic sandstone with minor interbeds of dark gray micaceous shale*

ATTACHMENT 3

COARSE GRAINED SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			Graphic Symbol	Group Symbol	TYPICAL GROUP NAMES
COARSE GRAINED SOILS More than half of materials is larger than 75 x 10^{-3} mm (No. 200) sieve size	GRAVELS More than half of coarse fraction is larger than 4.75 mm (No. 4) sieve size	CLEAN GRAVELS		GW	Well-graded gravel (with sand)
				GP	Poorly graded gravel (with sand)
		GRAVELS WITH SOME FINES		GW-GM	Well-graded gravel with silt (and sand)
				GW-GC	Well-graded gravel with clay (and sand)
				GP-GM	Poorly graded gravel with silt (and sand)
				GP-GC	Poorly graded gravel with clay (and sand)
		GRAVELS WITH FINES		GM	Silty gravel (with sand)
				GC	Clayey gravel (with sand)
	SANDS More than half of coarse fraction is smaller than 4.75 mm (No. 4) sieve size	CLEAN SANDS		SW	Well-graded sand (with gravel)
				SP	Poorly graded sand (with gravel)
		SANDS WITH SOME FINES		SW-SM	Well-graded sand with silt (and gravel)
				SW-SC	Well-graded sand with clay (and gravel)
				SP-SM	Poorly graded sand with silt (and gravel)
				SP-SC	Poorly graded sand with clay (and gravel)
		SANDS WITH FINES		SM	Silty sand (with gravel)
				SC	Clayey sand (with gravel)

Classification of earth material as shown above is based upon field inspection and/or mechanical analysis. Refer to ASTM Designation D-2488-90 "Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)" and D2487 "Standard Test Method for Classification of Soils for Engineering Purposes"

Relative Density	SPT N-value blows/0.3 m	Field Approximation
Very Loose	0 - 4	Easily penetrated 30 cm with 13 mm rebar pushed by hand
Loose	5 - 10	Easily penetrated several cm with 13 mm rebar pushed by hand
Medium dense	11 - 30	Easily to moderately penetrated with 13 mm rebar driven by 2.3 kg hammer
Dense	31 - 50	Penetrated 0.3 m with difficulty using 13 mm rebar driven by 2.3 kg hammer
Very dense	>50	Penetrated only a few cm with 13 mm rebar driven by 2.3 kg hammer

ATTACHMENT 4

FINE GRAINED SOIL CLASSIFICATION CHART

MAJOR DIVISIONS		Graphic Symbol	Group Symbol	TYPICAL GROUP NAMES		
FINE GRAINED SOILS More than half of material is smaller than 75×10^{-3} mm (No. 200) sieve size	INORGANIC FINE GRAINED SOIL		CL	<30% plus No. 200		Lean clay (with sand or gravel)
				≥30% plus No. 200	%sand ≥ %gravel	Sandy lean clay (with gravel)
					%sand < %gravel	Gravelly lean clay (with sand)
			ML	<30% plus No. 200		Silt (with sand or gravel)
				≥30% plus No. 200	%sand ≥ %gravel	Sandy silt (with gravel)
					%sand < %gravel	Gravelly silt (with sand)
			CH	<30% plus No. 200		Fat clay (with sand or gravel)
				≥30% plus No. 200	%sand ≥ %gravel	Sandy fat clay (with gravel)
					%sand < %gravel	Gravelly fat clay (with sand)
			MH	<30% plus No. 200		Elastic silt (with sand or gravel)
				≥30% plus No. 200	%sand ≥ %gravel	Sandy elastic silt (with gravel)
					%sand < %gravel	Gravelly elastic silt (with sand)
	ORGANIC FINE GRAINED SOIL		OL/OH	<30% plus No. 200		Organic soil (with sand or gravel)
				≥30% plus No. 200	%sand ≥ %gravel	Sandy Organic soil (with gravel)
					%sand < %gravel	Gravelly organic soil (with sand)

Classification of earth material as shown above is based upon field inspection and/or mechanical analysis. Refer to ASTM Designation D-2488-90 "Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)" and D2487 "Standard Test Method for Classification of Soils for Engineering Purposes"

Consistency	Approx. Undrained Shear Strength S_u KN/m^2	(ksf)	SPT N-value blows/0.3 m	Field Approximation
Very Soft	≤12	(<1/4)	<2	Squeezes between fingers when fist is closed; easily penetrated several inches by fist
Soft	13 - 25	(1/4 - 1/2)	2 - 4	Easily molded by fingers; easily penetrated several inches by thumb
Firm	26 - 50	(1/2 - 1)	5 - 8	Molded by strong pressure of fingers; can be penetrated several inches but thumb with moderate effort
Stiff	51 - 75	(1 - 1 1/2)	9 - 15	Dented by strong pressure of fingers; readily indented by thumb by can be penetrated only with great effort
Very stiff	76 - 100	(1 1/2 - 2)	16 - 30	Readily indented by thumbnail
Hard	>100	(>2)	>31	Indented with difficulty by thumbnail

Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B1-02	Location: 2.55 m Right of CL Align "REV" : Station 101+42.3	E.A. 05-282801
Dist.-County-Rt.-PM 05-SB-150-1.0/R1.6 -(KP) 1.6/R2.6	Project Description: Rincon Creek Bridges	Page 1 of 6
Date Started: 6-25-02 Completed: 6-26-02	Drill Rig: B-47 Trailer Mounted , #4787	Depth to Water : 3.53 m : 3.57 m Date : 7-9-02 : 7-28-02
Surface Elevation: 37.33	Drill Method/Hammer Type: Mud Rotary/63.5 KN Safety Hammer	
Total Depth (ft.) 90.0 (meters) 27.43	Drillers: Bob Gingell, Bob Eneix, Baird McKnight	
	Logged By: Sara von Schwind/ Dan Appelbaum	

Depth (ft / m)	Sampler/Bit	Sample Number	Recovery/Length %	Blows per 150mm	N (SPT)	Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Wet Unit Weight (KN/cubic meter)	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Elevation (m)
0 / 0										Ground Surface					37.33
										Silty Sand loose, brown, dry, fine grained, with sandstone cobbles					
1															37
2	94mm														
3 / 1										***Silty Sand with gravel*** medium dense, brown, moist, angular, fine to medium sand, angular and rounded fine to coarse gravel					
4															
5															36
6	SPT	1	72%	8,7,7	14										
7 / 2															
8								SM							35
9	94	2								Cobble					
10 / 3															
11	SPT	3	78%	2,2,10	12					No gravels with layers of sandy silt, soft, brown, with black organics					34
12															
13 / 4	94	4	37%							With coarse gravel up to 65 mm diameter, rounded					
14															33
15															

ATTACHMENT 5

Caltrans	SOIL BOREHOLE LOG	Geotechnical Design - North, Branch D
Borehole No. B1-02	*Location:* 2.55 m Right of CL Align. "REV" : Station 101+42.3	E.A. 05-282801
Dist.-County-Rt.-PM 05-SB-150-1.0/R1.6 *-(KP)* 1.6/R2.6	*Project Description:* Rincon Creek Bridges	*Page 2 of 6*

Depth ft	Depth m	Sampler/Bit	Sample Number	Recovery/Length %	Blows per 150mm	N (SPT)	Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Wet Unit Weight (KN/cubic meter)	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Elevation (m)
											Lean Clay hard, strong brown with gray streaks, moist, highly plastic, with structure (Casitas Formation)					
16		SPT	5	59%	9,14,23	37										
	5										strong brown					
17							431									32
18		94	6	68%							[Casing Depth]					
19																
	6															
20																
		SPT	7	46%	11,13,21	34			CL							31
21																
22																
23	7	94	8	21%			311									
24																30
25											very dark grayish brown, with thin lenses of silty SAND, very dark grayish brown					
		SPT	9		21,30,48	>70	>431									
26	8										Graded into					
		94	10	60%					SC		***Clayey SAND*** very dense, very dark grayish brown, fine, angular					
27																29
28											[Drilling mud surfacing in area of drilling. A total of 18 feet of casing was driven to stop circulation loses.]					
29		94	11	100%												
	9															
30																

Caltrans	SOIL BOREHOLE LOG	Geotechnical Design - North, Branch D
Borehole No. B1-02	Location: 2.55 m Right of CL Align. "REV" : Station 101+42.3	E.A. 05-282801
Dist.-County-Rt.-PM 05-SB-150-1.0/R1.6 -(KP) 1.6/R2.6	Project Description: Rincon Creek Bridges	Page 3 of 6

Depth ft	Depth m	Sampler/Bit	Sample Number	Recovery/Length %	Blows per 150mm	N (SPT)	Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Wet Unit Weight (KN/cubic meter)	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Elevation (m)
		SPT	12	100%	67	>70					Alternating Lenses of					
31											**Sandy Lean CLAY and Clayey SAND** sandy lean clay, hard, dark gray, and clayey sand very dense, very dark grayish brown, fine grained, angular, cemented. Lenses may vary from 0.6m to 1.2 m in thickness					28
32																
33	10	94	13	87%												
34																27
35		SPT	14	74%	35,70	>70										
36	11								SC/CL							
37																26
38		94	15	38%												
39	12															
40											same alternating lenses as thin as 0.15 m lenses with black organics in the clay					
		SPT	16	100%	27,70/14cm	>70										25
41																
42											**Clayey SAND** very dense, very dark grayish brown, fine grained angular, cemented					
43	13	94	17	88%												
44									SC							24
45																

Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B1-02

Location: 2.55 m Right of CL Align. "REV" : Station 101+42.3

E.A. 05-282801

Dist.-County-Rt.-PM 05-SB-150-1.0/R1.6 *-(KP)* 1.6/R2.6

Project Description: Rincon Creek Bridges

Depth ft	Depth m	Sampler/Bit	Sample Number	Recovery/Length %	Blows per 150mm	N (SPT)	Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Wet Unit Weight (KN/cubic meter)	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Elevation (m)
46	14	SPT	18	83%	52,50/8cm	>70			SC		***Clayey SAND*** very dense, very dark grayish brown, fine grained angular, cemented					
47																23
48		,94	19	35%												
49	15															
50		SPT	20	88%	29,50/10cm	>70										22
51											0.3 m lense of dark bluish gray, fine to coarse angular and rounded					
52																
53	16	94	21	46%												
54																21
55		SPT	22	100%	50/14cm	>70										
56	17										***Poorly graded SAND with silt*** very dense, gray, moist, fine grained, non-plastic					
57																20
58		94	23						SP							
59	18															
60																19

Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B1-02

Location: 2.55 m Right of CL Align. "REV" : Station 101+42.3

E.A. 05-282801

Dist.-County-Rt.-PM 05-SB-150-1.0/R1.6 -(KP) 1.6/R2.6

Project Description: Rincon Creek Bridges

Depth ft	Depth m	Sampler/Bit	Sampler: Sample Number	Sampler: Recovery/Length %	Sampler: Blows per 150mm	Sampler: N (SPT)	Sampler: Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Test Results: Wet Unit Weight (KN/cubic meter)	Test Results: Water Content (%)	Test Results: Liquid Limit (%)	Test Results: Plastic Limit (%)	Elevation (m)
61		SPT	24	87%	8,10,>50	>70	>431				***Sandy Lean CLAY*** hard, brownish gray, slightly moist, low plasticity, sand fraction is very fine grained					
62	19															
63		94	25	19%					CL		***Lean CLAY with Sand*** hard, brown with gray lenses of fine sand, slightly moist, moderate plasticity					18
64																
65		SPT	26	100%	60/15cm	>70					Alternating Layers of					
66	20										***Sandy CLAY and Clayey SAND*** hard, grayish brown, slightly moist, low to moderate plasticity, sands are very fine grained					
67									SC/CL							17
68		94	27	11%												
69	21															
70		SPT	28	100%	35,75/6cm	>70					***Sandy Lean CLAY*** hard, brown, slightly moist, low plasticity very fine sands					16
71																
72	22															
73		94	29	100%					CL							15
74																
75																

Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B1-02

Location: 2.55 m Right of CL Align. "REV" : Station 101+42.3

E.A. 05-282801

Dist.-County-Rt.-PM 05-SB-150-1.0/R1.6
-(KP) 1.6/R2.6

Project Description: Rincon Creek Bridges

Depth ft	Depth m	Sampler/Bit	Sample Number	Recovery/Length %	Blows per 150mm	N (SPT)	Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Wet Unit Weight (KN/cubic meter)	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Elevation (m)
	23										**Sandy Lean CLAY** hard, brown, slightly moist, low plasticity very fine sands					
76																14
77		94	30	96%												
78																
	24										*End of Borehole = 90 feet Installed 80 ft of 1.5 inch slotted PVC capped with 10 ft of 1.5 inch solid PVC. Backfilled with #8 Sand and sealed with bentonite chips. (Top of Pipe Elevation 37.33 m)*					
79																
80									CL							13
81																
82	25	94	31	100%												
83																12
84																
85		SPT	32	100%	70/9cm	>70										
	26															
86																11
87																
88		94	33	70%												
	27															
89																10
90																

Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B2-02	*Location:* 8.5 m Left of CL Align. "REV" : Station 101+18.5	*E.A.* 05-282801
Dist.-County-Rt.-PM 05-SB-150-1.1/1.6 *-(KP)* 1.6/R2.6	*Project Description:* Rincon Creek Bridges	*Page 1 of 6*
Date Started: 6/26/02 *Completed:* 6/27/02	*Drill Rig:* Trailer Mounted B-47, C# 4787	*Depth to Water* : 3.78 m : 3.79 m : *Date* : 7/9/02 : 7/23/02 :
Surface Elevation: 36.85 m	*Drill Method/Hammer Type:* Mud Rotary/ 63.5 kg Safety Hammer	
Total Depth (ft.) 83.5 *(meters)* 25.45	*Drillers:* Bob Gingell, Bob Enelx, Baird McKnight	
	Logged By: Dan Appelbaum, Sara von Schwind	

Depth (ft / m)	Sampler/Bit	Sampler: Sample Number	Sampler: Recovery/Length %	Sampler: Blows per 150mm	Sampler: N (SPT)	Sampler: Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Test Results: Wet Unit Weight (KN/cubic meter)	Test Results: Water Content (%)	Test Results: Liquid Limit (%)	Test Results: Plastic Limit (%)	Elevation (m)
0 ft / 0 m										Ground Surface					36.85
1	94mm		0												
2															
3 / 1															36
4															
5															
6	SPT	1	0	6,6,17	23			SC		***Clayey SAND*** medium dense, brown, moist, low plasticity, fine grained, angular, poorly graded					35
7 / 2															
8	94mm		23					CL		***Sandy Lean CLAY with gravel and cobbles*** brown, moist, low plasticity, poorly graded fine sand, gravels and cobbles appear to be sandstone, gray and brown, fine grained					
9										***Sandstone Cobbles and Boulders*** greenish-gray, black, brown, hard, subrounded					34
10 / 3															
11								GP							
12	94mm	2	13												
13 / 4															33
14															
15								SP-SC		***Poorly Graded SAND with gravel and Clay*** very dense, brown with lenses of gray, moist, slight plasticity, fine grained, gravel is subrounded					

Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B2-02

Location: 8.5 m Left of CL Align. "REV" : STA 101+18.5

E.A. 05-282801

Dist.-County-Rt.-PM 05-SB-150-1.1/1.6 -(KP) 1.6/R2.6

Project Description: Rincon Creek Bridges

Depth ft	Depth m	Sampler/Bit	Sampler: Sample Number	Sampler: Recovery/Length %	Sampler: Blows per 150mm	Sampler: N (SPT)	Sampler: Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Test Results: Wet Unit Weight (KN/cubic meter)	Test Results: Water Content (%)	Test Results: Liquid Limit (%)	Test Results: Plastic Limit (%)	Elevation (m)
16	5	SPT	3	0	12,33,50	>70			SP-SC		**Poorly Graded SAND with gravel and Clay** very dense, brown with lenses of gray, moist, slight plasticity, fine grained, gravel is subrounded					32
17																
18		94mm		37					GP		**Poorly graded GRAVEL** gray, black, brown, red, coarse to medium, subrounded					
									CL		**Sandy Lean CLAY** hard, brown, slightly moist, low plasticity, with fine grained sand (Casitas Formation)					
19	6										**Poorly graded SAND with clay** very dense, brown, slightly moist, slightly plastic, fine grained					31
20		SPT	4	100	30,50/12cm	>70										
21																
22																30
23	7	94mm		37												
24																
25		SPT	5	100	70/12cm	>70			SP-SC		[Lost circulation at 7.6 m and never regained circulation]					29
26	8															
27																
28		94mm		81												28
29	9															
30																

Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B2-02

Location: 8.5 m Left of CL Align. "REV" : STA 101+18.5

E.A. 05-282801

Dist.-County-Rt.-PM 05-SB-150-1.1/1.6
-(KP) 1.6/R2.6

Project Description: Rincon Creek Bridges

Depth ft	Depth m	Sampler/Bit	Sample Number	Recovery/Length %	Blows per 150mm	N (SPT)	Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Wet Unit Weight (KN/cubic meter)	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Elevation (m)
31		SPT	6	0	38,50/21cm	>70			RX		***Sandstone Layer*** grayish-tan, very hard, fresh					
											Poorly graded SAND very dense, grayish brown, moist, non-plastic, fine grained					
32		94mm	7	100												27
	10															
33									SP							
34		94mm		100												
35											dark reddish brown, with lenses of sandy lean clay and sandy silt up to 0.15 m thickness					
		SPT	8	97	32,70	>70			SP/CL							26
36											***Silty SAND*** very dense, dark reddish brown, moist, angular, fine grained with layers of lean clay and silt up to 0.15 m thickness					
	11															
37																
38		94mm	9	100												
39																25
	12															
40		SPT	10	100	50/11cm	>70					Grayish brown and dark reddish brown with some lenses of silty sand with gravel, grayish brown fine subrounded gravel					
41																
42									SM							24
	13	94mm	11	36												
43																
44																
45																

Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B2-02

Location: 8.5 m Left of CL Align. "REV" : STA 101+18.5

E.A. 05-282801

Dist.-County-Rt.-PM 05-SB-150-1.1/1.6 *-(KP)* 1.6/R2.6

Project Description: Rincon Creek Bridges

Depth ft	Depth m	Sampler/Bit	Sample Number	Recovery/Length %	Blows per 150mm	N (SPT)	Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Wet Unit Weight (KN/cubic meter)	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Elevation (m)
											Up to 0.6 m lenses of lean clay, dark reddish brown, hard, moist, with black organics					
46	14	SPT	12	97	31,70	>70										23
47									SM/C							
48		94mm	13	55												
49	15															22
50		SPT	14	87	68	>70					***Poorly graded SAND*** very dense, dark gray, wet, fine grained, angular, cemented, with occassional black organics					
51																
52																21
53	16	94mm	15	9					SP							
54																
55		SPT	16	100	54	>70					Very fine grained with lenses of silt, hard, dark gray, moist					20
56	17															
57																
58		94mm	17	39					SP/ML							19
59	18															
60																

Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B2-02

Location: 8.5 m Left of CL Align. "REV" : STA 101+18.5

E.A. 05-282801

Dist.-County-Rt.-PM 05-SB-150-1.1/1.6 -(KP) 1.6/R2.6

Project Description: Rincon Creek Bridges

Depth ft	Depth m	Sampler/Bit	Sample Number	Recovery/Length %	Blows per 150mm	N (SPT)	Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Wet Unit Weight (KN/cubic meter)	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Elevation (m)
		SPT	18	100	34,70	>70					Very fine grained with lenses of silt, hard, dark gray, moist					
61																
62																18
	19															
63		94mm	19	36												
64																
									CL		***Lean CLAY*** hard, dark reddish brown, moist, highly plastic with structure					
65		SPT	20	100	51	>70	>431				***SILT interbedded with Lean CLAY*** silt, hard, dark reddish brown, moist interbedded with lean clay, hard dark reddish brown, moist with occassional black organics					17
	20															
66																
67																
		94mm	21	66			>431									
68																
																16
69	21								CL/ML							
70																
		SPT	22	100	42,50/10cm	>70	>431									
71																
																15
72																
	22															
73		94mm	23	100												
74																
75																14

Caltrans

SOIL BOREHOLE LOG

Geotechnical Design - North, Branch D

Borehole No. B2-02

Location: 8.5 m Left of CL Align. "REV" : STA 101+18.5

E.A. 05-282801

Dist.-County-Rt.-PM 05-SB-150-1.1/1.6
-(KP) 1.6/R2.6

Project Description: Rincon Creek Bridges

Depth ft	Depth m	Sampler/Bit	Sampler: Sample Number	Sampler: Recovery/Length %	Sampler: Blows per 150mm	Sampler: N (SPT)	Sampler: Pocket Pen. (kpa)	Torvane (kpa)	USCS	Graphic Log	Description of Material (consistency, color, texture moisture content)	Test Results: Wet Unit Weight (KN/cubic meter)	Test Results: Water Content (%)	Test Results: Liquid Limit (%)	Test Results: Plastic Limit (%)	Elevation (m)
76	23	94mm	24	0												
77											***Clayey SAND*** very dense, dark reddish brown, fine grained, angular, with occassional coarse grained, rounded, very cemented					
78		94mm	25	71												13
79	24								SC							
80		SPT	26	100	70/11cm	>70										
81											Fine to coarse grained					
82	25	94mm	27	100												12
83																
84											End of Borehole					
85											***End of Borehole = 83.5 feet Installed 60 feet of 1.5 inch slotted PVC capped with 20 feet of 1.5 inch solid PVC. Backfilled with #8 sand and sealed with bentonite chips. (Top of pipe Elevation 36.89 m)***					11
86	26															
87																
88																10
89	27															
90																

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SB	150	1.1		

REGISTERED ENGINEER-CIVIL

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER R. MAHALLATI No. 49374 Exp. 9-30-96 CIVIL STATE OF CALIFORNIA

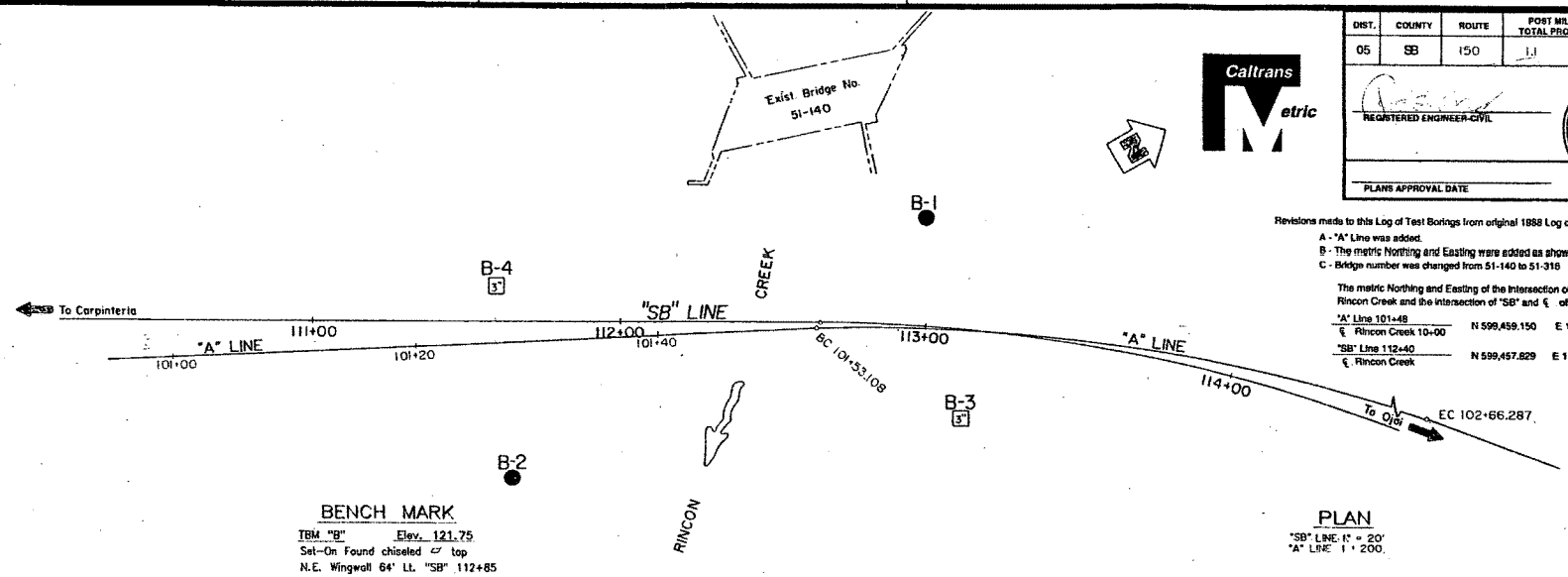
Caltrans Metric

Revisions made to this Log of Test Borings from original 1988 Log of Test Borings are:

A - "A" Line was added.
B - The metric Northing and Easting were added as shown below.
C - Bridge number was changed from 51-140 to 51-316

The metric Northing and Easting of the intersection of "A" and ℄ of Rincon Creek and the intersection of "SB" and ℄ of Rincon Creek are:

"A" Line 101+48 / ℄ Rincon Creek 10+00	N 599,459.150	E 1,864,953.599
"SB" Line 112+40 / ℄ Rincon Creek	N 599,457.829	E 1,864,952.357

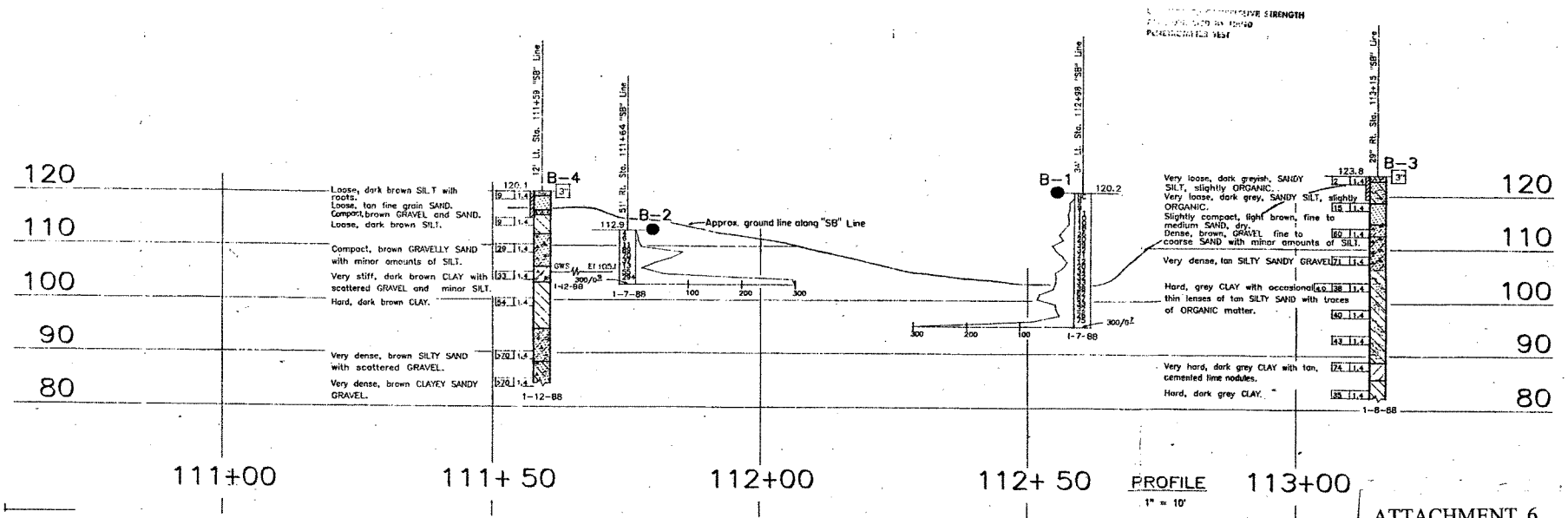


BENCH MARK

TBM "B" Elev. 121.75
Set-On Found chiseled ⌰ top
N.E. Wingwall 64' Lt. "SB" 112+85

PLAN

"SB" LINE 1" = 20'
"A" LINE 1" = 200'



PROFILE
1" = 10'

ATTACHMENT 6

LEGEND OF BORING OPERATIONS

LEGEND OF EARTH MATERIALS

CONSISTENCY CLASSIFICATION FOR SOILS

According to the Standard Penetration Test

Penetration Index (Blows/Ft.)	Granular	Cohesive
0-4	Very loose	Very soft
5-9	Loose	Soft
10-19	Slightly compact	Stiff
20-34	Compact	Very stiff
35-69	Dense	Hard
> 70	Very dense	Very hard

NOTE Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis

UNIFIED SOIL CLASSIFICATION SYSTEM

GEOTECHNICAL BRANCH - TRANSPORTATION LABORATORY

DRAWN BY	bruce cohalan 1-88	FIELD INVESTIGATION BY	CHARGE UNIT	EXPEND AUTHOR	SPEC DESIGN
CHECKED BY		Gregory G. Miller 632			

State of CALIFORNIA DEPARTMENT OF TRANSPORTATION

STRUCTURES - DESIGN

Noel J. Suan 43024
PROJECT ENGINEER REGISTERED CIVIL ENGINEER NO.

BRIDGE NO. 51-316
POST MILE 1.1

RINCON CREEK BRIDGE
LOG OF TEST BORINGS

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

CU 05

Disregard prints bearing earlier revision dates

REVISION DATES (PRELIMINARY STAGE ONLY)

SHEET OF

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: SARA VON SCHWIND
Associate Materials & Research Engineer
Geotechnical Design / North / Branch D

Date: October 3, 2002

File: 05-SB-150-1.6/R2.6
Rincon Creek Bridge
Br. No. 51-0316
EA: 05-282801

From: DOUGLAS M. PARKS
Chief
Corrosion Technology Branch
Engineering Services

Subject: Corrosion Review for Rincon Creek Bridge

We have completed our corrosion mitigation review for the Rincon Creek Bridge project outlined in a September 16, 2002, memorandum sent to Doug Parks of the Corrosion Technology Branch. Our review is based on corrosion test results of soil and water samples, information from the Log of Test Borings, and the California Department of Transportation (Department) Bridge Design Specifications, Article 8.22 (July 2000) and Interim Memo to Designers 10-5 (December 2000).

Project Description

The project site is located on Route 150 in Santa Barbara County. It is proposed to replace the existing bridge, No. 51-140, with a wider bridge, No. 51-316, to accommodate the new traffic lanes. At this time, it is proposed that the bridge foundations will either consist of CIDH piles or driven steel H-piles. The pile cap for the foundations will be constructed 22 feet (6.7 meters) below the existing ground surface, which is below the existing ground water table of approximately 10 feet (3 meters).

Corrosion Review

The Department defines a corrosive area as an area where the soil and/or water has a minimum resistivity of less than 1000 ohm-cm, and either contains more than 500 ppm of chlorides, more than 2000 ppm of sulfates, or has a pH of 5.5 or less.

Subsurface soil samples were obtained and tested for pH, minimum resistivity, sulfate concentration, and chloride concentration in accordance with CTM 643, CTM 417, and CTM 422. The soil sample test results are as follows:

The pH level of the soil ranged from 7.5 to 8.4, and the minimum resistivity of the soil was 620 ohm-cm. The sulfate concentration of the soil ranged from 340 ppm to 1000 ppm, and the chloride concentration of the soil ranged from 94 ppm to 110ppm.

A water sample was also collected at the site and tested for pH, minimum resistivity, sulfate concentration, and chloride concentration. The water sample test results are as follows:

The pH level of the water was 7.6, and the minimum resistivity of the water was 640 ohm-cm. The sulfate concentration of the water was 340 ppm, and the chloride concentration of the water was 94 ppm.

The soil and water present at the site are non-corrosive to the proposed foundation elements.

Corrosion Recommendations

In order to maintain a 75-year design life for the structure, the proposed structure elements should be designed according to the following provisions:

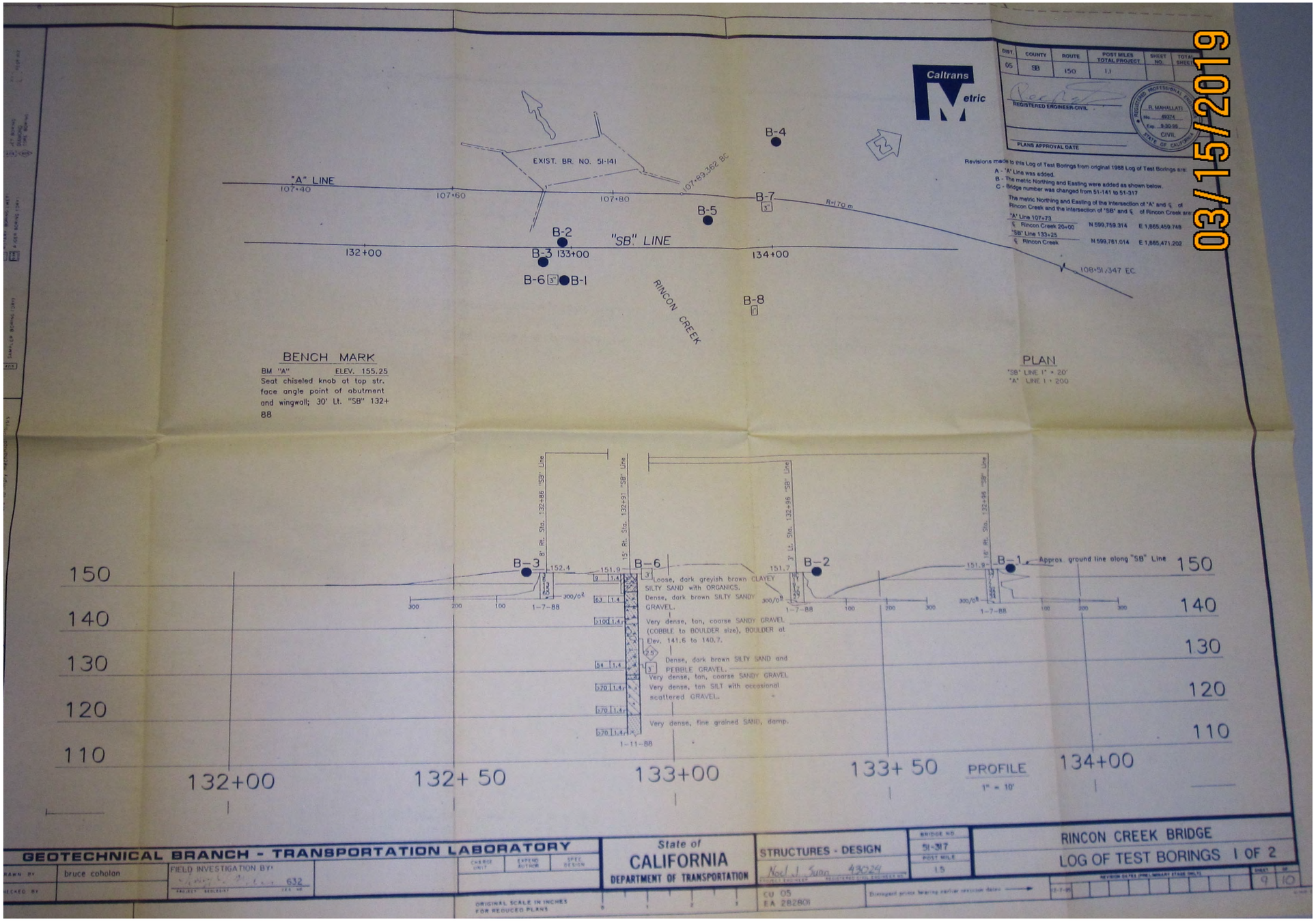
- Reinforced concrete at this site should be designed in accordance with BDS Table 8.22.2 (July 2000).

- If driven steel H-piles are used, no corrosion mitigation measures are required.

If you have any questions regarding our comments, please contact Mike Piepoli of my staff at (916) 227-7068.

Attachment

c: Mike Piepoli, Susan Hall, Arron Rambach, Corrosion Technology Branch



BRIDGE 5-SB-0137 LOTB, SHEET 1 of 2

Santa Barbara-Ventura Tie-In Pipeline Casitas Municipal Water District Water Works Engineers Santa Barbara & Ventura Counties, CA	Plate No. A-1
BAJADA Geosciences, Inc.	Project no. 1901.0101

Caltrans Metric

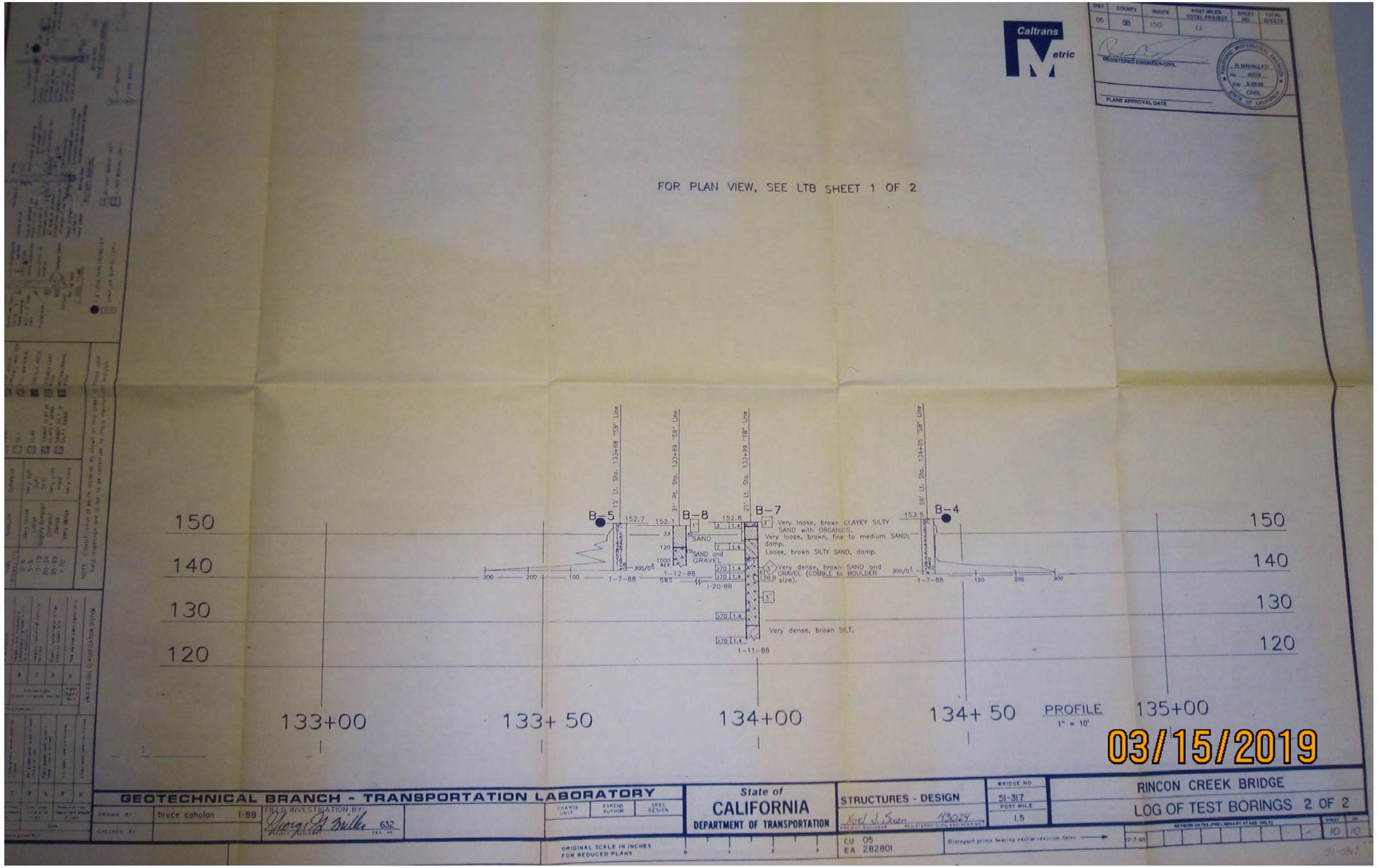
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SB	150	1.5		

REGISTERED ENGINEER-CIVIL

R. MAHALLATI
No. 69374
Exp. 9-30-96
CIVIL
STATE OF CALIFORNIA

PLANS APPROVAL DATE

FOR PLAN VIEW, SEE LTB SHEET 1 OF 2



03/15/2019

GEOTECHNICAL BRANCH - TRANSPORTATION LABORATORY

DRAWN BY: bruce coholon 1-88
CHECKED BY:
FIELD INVESTIGATION BY: Gregg A. Miller 632
CHARGE UNIT | EXPEND AUTHOR | SPEC DESIGN

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

State of CALIFORNIA
DEPARTMENT OF TRANSPORTATION

STRUCTURES - DESIGN
Noel J. Swan 13024
PROJECT ENGINEER REGISTERED CIVIL ENGINEER NO.

CU 05
EA 282801

Disregard prints bearing earlier revision dates

BRIDGE NO. 51-317
POST MILE 1.5

RINCON CREEK BRIDGE
LOG OF TEST BORINGS 2 OF 2

REVISION DATES (PRELIMINARY STAGE ONLY)
12-7-95

SHEET 10 OF 10

51-0317

BRIDGE 5-SB-0137 LOTB, SHEET 2 of 2

Santa Barbara-Ventura Tie-In Pipeline
Casitas Municipal Water District
Water Works Engineers
Santa Barbara & Ventura Counties, CA

Plate No. A-2

BAJADA Geosciences, Inc.

Project no. 1901.0101

APPENDIX B

Historic Aerial Photographs

Scale undetermined

C-430, FRAME A-23, 1929

Santa Barbara-Ventura Tie-In Pipeline
Casitas Municipal Water District
Water Works Engineers
Santa Barbara & Ventura Counties, CA

Plate No.

B-1.1

BAJADA Geosciences, Inc.

Project no.
1901.0101

Scale undetermined

C-4950, FRAME SF-145, 1937

Santa Barbara-Ventura Tie-In Pipeline
Casitas Municipal Water District
Water Works Engineers
Santa Barbara & Ventura Counties, CA

Plate No.

B-1.2

BAJADA Geosciences, Inc.

Project no.

1901.0101

Scale undetermined

C-9800, FRAME 1059, 1945

Santa Barbara-Ventura Tie-In Pipeline
Casitas Municipal Water District
Water Works Engineers
Santa Barbara & Ventura Counties, CA

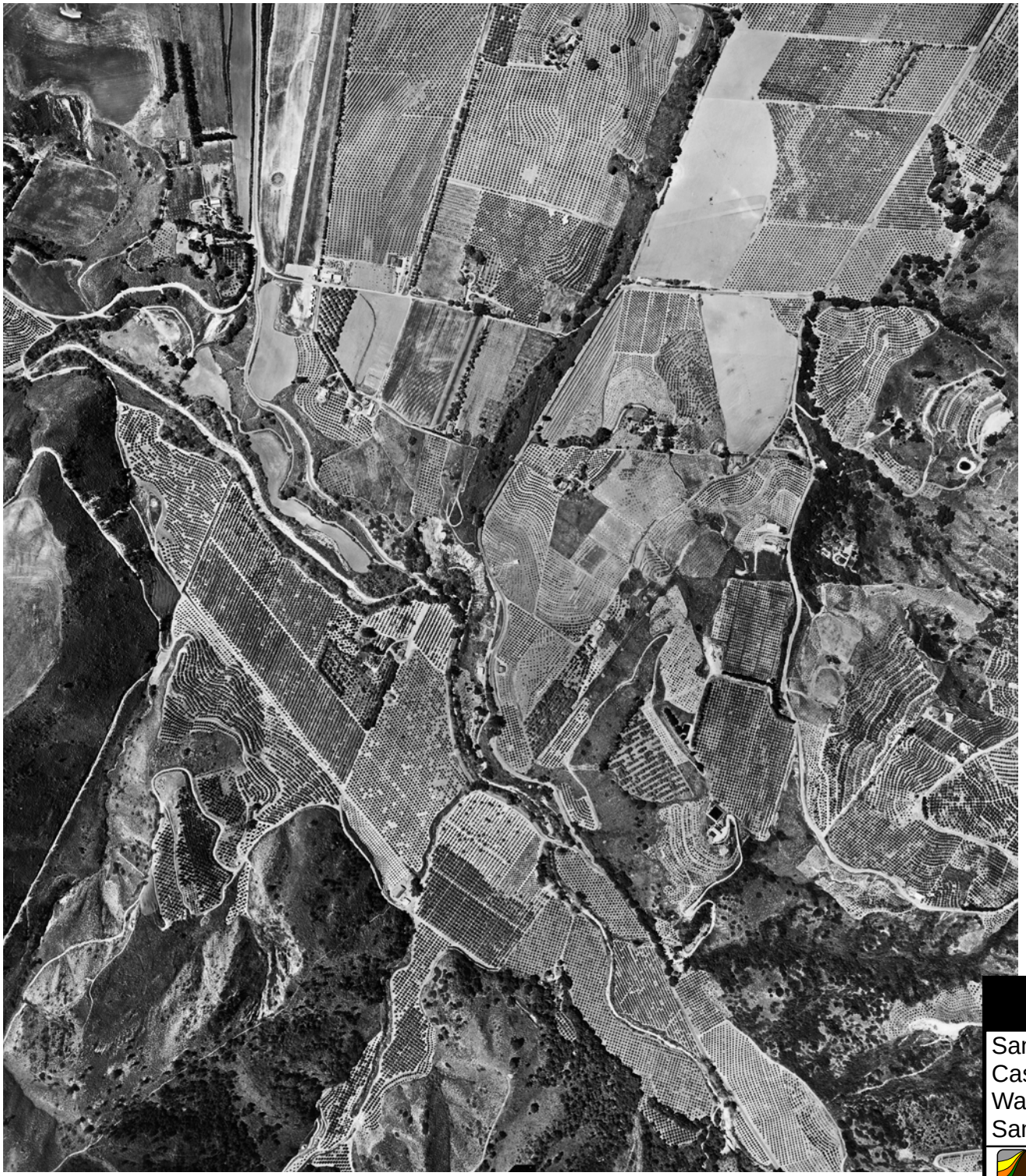
Plate No.

B-1.3

BAJADA Geosciences, Inc.

Project no.

1901.0101



Scale undetermined

HA-AN, FRAME 6-20, 1956

Santa Barbara-Ventura Tie-In Pipeline
Casitas Municipal Water District
Water Works Engineers
Santa Barbara & Ventura Counties, CA

Plate No.

B-1.4

BAJADA Geosciences, Inc.

Project no.

1901.0101

Scale undetermined

HB-FV, FRAME 39, 1965

Santa Barbara-Ventura Tie-In Pipeline
Casitas Municipal Water District
Water Works Engineers
Santa Barbara & Ventura Counties, CA

Plate No.

B-1.5

BAJADA Geosciences, Inc.

Project no.
1901.0101

Scale undetermined

HB-NN, FRAME 21, 1969

Santa Barbara-Ventura Tie-In Pipeline
Casitas Municipal Water District
Water Works Engineers
Santa Barbara & Ventura Counties, CA

Plate No.

B-1.6

BAJADA Geosciences, Inc.

Project no.

1901.0101

Scale undetermined

HB-RD, FRAME 1, 1970

Santa Barbara-Ventura Tie-In Pipeline
Casitas Municipal Water District
Water Works Engineers
Santa Barbara & Ventura Counties, CA

Plate No.

B-1.7

BAJADA Geosciences, Inc.

Project no.

1901.0101

Scale undetermined

HB-SY, FRAME 41, 1971

Santa Barbara-Ventura Tie-In Pipeline
Casitas Municipal Water District
Water Works Engineers
Santa Barbara & Ventura Counties, CA

Plate No.

B-1.8

BAJADA Geosciences, Inc.

Project no.
1901.0101

Appendix E

Noise Measurements, Modeling, and Equipment Specifications

- Freq Weight : A
- Time Weight : FAST
- Level Range : 40-100
- Max dB : 87.1 - 2006/06/18 09:52:01
- Level Range : 40-100
- SEL : 93.6
- Leq : 64.1
-

No.s	Date Time	(dB)				
1	2006/06/18 09:41:13	44.8	45.3	45.3	47.4	48.0
6	2006/06/18 09:41:18	47.7	47.7	46.3	48.0	48.0
11	2006/06/18 09:41:23	47.5	51.6	55.5	69.2	71.7
16	2006/06/18 09:41:28	65.2	62.2	57.6	57.2	44.6
21	2006/06/18 09:41:33	42.7	43.1	44.0	42.0	41.1
26	2006/06/18 09:41:38	40.3	41.0	40.9	41.1	39.4
31	2006/06/18 09:41:43	41.3	38.3	42.3	40.2	37.4
36	2006/06/18 09:41:48	39.0	37.8	37.5	39.1	38.1
41	2006/06/18 09:41:53	33.6	32.5	35.3	34.0	34.6
46	2006/06/18 09:41:58	35.5	35.3	39.0	45.6	54.4
51	2006/06/18 09:42:03	62.2	62.2	64.8	71.6	80.2
56	2006/06/18 09:42:08	72.6	63.9	58.4	55.5	54.0
61	2006/06/18 09:42:13	54.0	53.4	50.1	46.6	42.2
66	2006/06/18 09:42:18	39.2	38.8	42.7	45.5	49.6
71	2006/06/18 09:42:23	52.1	55.3	69.3	72.7	66.1
76	2006/06/18 09:42:28	72.4	69.3	63.9	58.3	53.7
81	2006/06/18 09:42:33	55.7	40.5	40.8	32.8	33.5
86	2006/06/18 09:42:38	34.9	31.3	31.3	29.3	29.5
91	2006/06/18 09:42:43	30.7	35.4	31.9	30.9	29.5
96	2006/06/18 09:42:48	31.8	34.3	30.0	34.4	33.4
101	2006/06/18 09:42:53	32.9	31.2	31.6	31.5	42.1
106	2006/06/18 09:42:58	32.7	33.4	32.9	33.6	33.2
111	2006/06/18 09:43:03	33.4	34.3	35.5	32.7	33.3
116	2006/06/18 09:43:08	35.5	33.1	31.9	35.1	32.4
121	2006/06/18 09:43:13	39.2	33.2	33.3	31.8	34.4
126	2006/06/18 09:43:18	35.3	34.7	31.9	33.2	31.7
131	2006/06/18 09:43:23	32.6	34.0	30.5	30.6	33.5
136	2006/06/18 09:43:28	32.3	30.4	34.5	34.0	34.8
141	2006/06/18 09:43:33	31.2	32.3	29.8	29.7	30.8
146	2006/06/18 09:43:38	32.9	30.0	38.9	30.6	33.7
151	2006/06/18 09:43:43	29.9	31.4	30.8	34.3	33.6
156	2006/06/18 09:43:48	34.5	37.0	40.5	42.5	45.3
161	2006/06/18 09:43:53	53.1	63.5	71.2	66.1	59.5
166	2006/06/18 09:43:58	57.7	57.2	49.7	37.5	36.5
171	2006/06/18 09:44:03	30.9	47.0	50.3	49.0	59.9
176	2006/06/18 09:44:08	63.9	64.7	69.6	78.4	67.8
181	2006/06/18 09:44:13	64.1	59.5	56.8	60.1	61.6
186	2006/06/18 09:44:18	70.7	69.7	64.7	60.7	60.8
191	2006/06/18 09:44:23	56.3	49.2	40.7	34.9	32.9
196	2006/06/18 09:44:28	35.7	32.8	32.6	30.9	30.6
201	2006/06/18 09:44:33	36.6	31.2	40.8	31.2	42.1
206	2006/06/18 09:44:38	32.6	32.4	32.4	45.5	46.1
211	2006/06/18 09:44:43	58.0	57.9	61.3	65.1	73.6
216	2006/06/18 09:44:48	69.0	59.1	56.0	53.5	53.7
221	2006/06/18 09:44:53	53.0	46.6	42.3	42.8	45.4
226	2006/06/18 09:44:58	47.9	50.7	54.9	67.0	72.2
231	2006/06/18 09:45:03	68.3	60.5	57.2	54.0	53.0
236	2006/06/18 09:45:08	45.8	48.0	36.7	37.1	34.6
241	2006/06/18 09:45:13	33.5	40.5	35.4	32.9	31.6
246	2006/06/18 09:45:18	36.2	31.1	32.1	33.0	32.8
251	2006/06/18 09:45:23	33.9	37.6	32.7	32.2	33.9
256	2006/06/18 09:45:28	33.1	31.6	30.9	36.2	30.3
261	2006/06/18 09:45:33	32.6	31.9	33.6	31.9	35.2
266	2006/06/18 09:45:38	33.1	36.1	35.9	36.9	38.3
271	2006/06/18 09:45:43	42.0	43.8	45.1	47.1	52.6
276	2006/06/18 09:45:48	60.9	65.6	63.9	59.9	54.7
281	2006/06/18 09:45:53	51.5	52.2	52.3	47.1	38.0
286	2006/06/18 09:45:58	32.9	32.7	30.8	30.7	30.6
291	2006/06/18 09:46:03	33.4	32.6	34.8	31.9	33.3
296	2006/06/18 09:46:08	30.5	31.4	29.6	31.4	43.9
301	2006/06/18 09:46:13	46.1	38.4	31.4	31.3	38.0
306	2006/06/18 09:46:18	37.1	32.9	45.6	30.3	31.0
311	2006/06/18 09:46:23	32.9	31.4	31.4	31.4	31.0
316	2006/06/18 09:46:28	33.1	31.2	31.5	33.8	34.0
321	2006/06/18 09:46:33	35.2	36.8	38.9	41.3	44.9
326	2006/06/18 09:46:38	50.2	56.1	61.3	71.3	75.6
331	2006/06/18 09:46:43	74.5	68.7	65.5	63.2	63.2
336	2006/06/18 09:46:48	72.4	71.9	72.3	68.9	75.0
341	2006/06/18 09:46:53	74.4	64.3	62.4	60.1	56.8
346	2006/06/18 09:46:58	46.8	45.7	41.2	44.3	48.6
351	2006/06/18 09:47:03	52.6	68.0	70.7	63.4	60.1
356	2006/06/18 09:47:08	58.7	57.6	41.5	35.0	33.8
361	2006/06/18 09:47:13	33.6	34.6	32.9	34.8	33.6
366	2006/06/18 09:47:18	33.9	34.1	36.5	34.6	34.8
371	2006/06/18 09:47:23	35.4	34.0	35.7	32.9	34.8
376	2006/06/18 09:47:28	33.6	36.9	33.8	34.9	33.3
381	2006/06/18 09:47:33	32.9	34.0	35.5	39.6	48.9
386	2006/06/18 09:47:38	52.9	53.3	54.9	59.5	66.3
391	2006/06/18 09:47:43	70.3	60.6	55.8	51.9	49.1
396	2006/06/18 09:47:48	46.6	46.5	47.8	41.4	40.2
401	2006/06/18 09:47:53	35.9	34.2	32.8	31.8	32.1
406	2006/06/18 09:47:58	30.8	32.1	31.7	32.5	42.6
411	2006/06/18 09:48:03	34.8	36.7	43.2	49.0	58.0
416	2006/06/18 09:48:08	58.8	60.8	65.4	72.8	80.0
421	2006/06/18 09:48:13	68.2	61.4	57.0	56.1	54.4

426	2006/06/18	09:48:18	51.6	51.4	47.8	40.3	47.5
431	2006/06/18	09:48:23	40.1	45.4	38.9	33.3	34.9
436	2006/06/18	09:48:28	31.2	32.3	32.2	30.6	34.5
441	2006/06/18	09:48:33	49.6	36.1	35.0	31.4	34.2
446	2006/06/18	09:48:38	35.3	40.2	35.7	32.3	42.7
451	2006/06/18	09:48:43	42.2	34.9	32.7	32.3	32.0
456	2006/06/18	09:48:48	34.1	30.9	33.3	36.6	45.6
461	2006/06/18	09:48:53	31.7	31.5	43.9	33.2	32.7
466	2006/06/18	09:48:58	31.9	38.8	37.8	31.9	33.4
471	2006/06/18	09:49:03	39.0	33.5	42.8	32.9	34.1
476	2006/06/18	09:49:08	41.5	33.8	36.4	43.3	47.1
481	2006/06/18	09:49:13	49.7	50.4	54.5	61.7	73.3
486	2006/06/18	09:49:18	71.3	63.6	60.0	62.5	53.1
491	2006/06/18	09:49:23	38.7	35.9	41.3	47.4	55.1
496	2006/06/18	09:49:28	61.5	62.0	66.1	70.7	79.9
501	2006/06/18	09:49:33	73.9	65.4	61.8	58.9	56.4
506	2006/06/18	09:49:38	53.7	53.0	51.1	47.8	44.6
511	2006/06/18	09:49:43	39.3	36.3	41.3	37.0	34.0
516	2006/06/18	09:49:48	32.7	37.1	32.8	32.2	32.8
521	2006/06/18	09:49:53	32.8	42.0	33.6	33.5	34.8
526	2006/06/18	09:49:58	34.6	34.6	33.8	33.2	35.0
531	2006/06/18	09:50:03	36.1	38.0	35.7	34.6	33.4
536	2006/06/18	09:50:08	32.3	31.6	31.0	31.6	37.2
541	2006/06/18	09:50:13	32.7	31.5	30.2	30.8	35.2
546	2006/06/18	09:50:18	30.4	30.8	32.0	33.5	39.0
551	2006/06/18	09:50:23	31.8	35.5	37.1	41.5	45.6
556	2006/06/18	09:50:28	47.5	53.1	62.8	73.3	69.7
561	2006/06/18	09:50:33	60.7	60.3	57.3	45.9	35.0
566	2006/06/18	09:50:38	33.7	32.0	29.9	31.1	31.0
571	2006/06/18	09:50:43	30.9	31.1	31.4	33.2	31.6
576	2006/06/18	09:50:48	32.6	33.3	33.6	36.0	37.5
581	2006/06/18	09:50:53	45.1	49.3	57.0	58.9	60.5
586	2006/06/18	09:50:58	63.8	70.7	80.8	75.1	68.0
591	2006/06/18	09:51:03	72.5	68.0	62.3	60.3	58.3
596	2006/06/18	09:51:08	53.8	39.1	36.3	35.5	34.7
601	2006/06/18	09:51:13	35.0	32.0	34.9	36.6	35.9
606	2006/06/18	09:51:18	34.9	36.9	38.3	42.5	48.9
611	2006/06/18	09:51:23	49.3	52.8	56.3	58.6	62.0
616	2006/06/18	09:51:28	74.6	78.3	73.4	66.4	64.0
621	2006/06/18	09:51:33	61.3	60.8	50.3	41.7	38.6
626	2006/06/18	09:51:38	35.6	35.4	36.3	37.1	47.8
631	2006/06/18	09:51:43	52.1	41.3	37.7	38.6	39.0
636	2006/06/18	09:51:48	37.8	37.5	40.4	46.6	51.3
641	2006/06/18	09:51:53	58.8	61.4	63.0	69.1	71.3
646	2006/06/18	09:51:58	71.2	76.2	82.6	86.2	74.6
651	2006/06/18	09:52:03	72.0	69.3	69.2	69.2	60.8
656	2006/06/18	09:52:08	59.3	57.5	55.5	53.8	51.8
661	2006/06/18	09:52:13	50.4	46.5	44.4	42.3	40.0
666	2006/06/18	09:52:18	37.6	35.0	36.0	38.0	35.8
671	2006/06/18	09:52:23	35.9	33.2	37.2	40.0	36.2
676	2006/06/18	09:52:28	33.8	38.0	32.5	31.1	31.8
681	2006/06/18	09:52:33	33.4	32.7	35.6	37.1	38.8
686	2006/06/18	09:52:38	40.1	38.3	37.0	33.8	40.2
691	2006/06/18	09:52:43	37.9	40.8	39.0	39.2	37.7
696	2006/06/18	09:52:48	35.1	30.9	32.4	31.7	31.4
701	2006/06/18	09:52:53	33.6	33.4	32.4	32.8	33.0
706	2006/06/18	09:52:58	33.9	35.6	34.3	32.5	34.3
711	2006/06/18	09:53:03	32.9	43.2	34.6	41.9	39.3
716	2006/06/18	09:53:08	45.3	53.9	54.0	56.1	61.5
721	2006/06/18	09:53:13	70.8	73.9	65.5	59.6	58.6
726	2006/06/18	09:53:18	57.2	47.5	45.5	45.9	41.1
731	2006/06/18	09:53:23	44.1	45.5	44.9	43.4	42.3
736	2006/06/18	09:53:28	49.8	41.8	40.1	36.3	32.3
741	2006/06/18	09:53:33	31.8	32.6	33.1	39.9	47.5
746	2006/06/18	09:53:38	35.2	33.9	34.3	43.0	38.7
751	2006/06/18	09:53:43	35.8	33.9	57.1	39.1	42.7
756	2006/06/18	09:53:48	43.2	40.6	44.2	36.9	41.9
761	2006/06/18	09:53:53	38.0	34.6	35.3	36.2	33.8
766	2006/06/18	09:53:58	36.8	36.2	32.0	32.1	43.4
771	2006/06/18	09:54:03	31.9	30.4	37.9	32.4	33.8
776	2006/06/18	09:54:08	33.1	36.9	40.4	42.3	45.7
781	2006/06/18	09:54:13	50.0	55.6	65.8	72.1	66.6
786	2006/06/18	09:54:18	61.0	64.0	59.9	62.6	63.4
791	2006/06/18	09:54:23	63.5	67.9	77.9	74.9	62.8
796	2006/06/18	09:54:28	57.3	55.8	54.4	52.2	54.3
801	2006/06/18	09:54:33	48.6	43.4	40.1	36.9	35.2
806	2006/06/18	09:54:38	36.8	35.2	34.3	32.9	31.5
811	2006/06/18	09:54:43	34.8	41.7	32.9	30.8	32.9
816	2006/06/18	09:54:48	30.4	32.9	32.3	32.5	33.0
821	2006/06/18	09:54:53	40.4	33.8	32.9	35.1	33.2
826	2006/06/18	09:54:58	33.3	31.6	30.5	32.1	31.6
831	2006/06/18	09:55:03	46.7	40.2	29.4	30.8	30.5
836	2006/06/18	09:55:08	30.3	40.6	30.0	30.0	29.9
841	2006/06/18	09:55:13	30.4	46.2	29.9	29.8	29.3
846	2006/06/18	09:55:18	30.1	29.6	29.4	30.3	30.7
851	2006/06/18	09:55:23	43.3	31.4	30.8	31.3	31.8
856	2006/06/18	09:55:28	36.4	31.6	33.0	38.6	31.7
861	2006/06/18	09:55:33	32.7	33.8	43.3	50.1	40.8
866	2006/06/18	09:55:38	37.9	35.3	31.4	34.0	30.4
871	2006/06/18	09:55:43	30.1	30.8	45.8	31.0	30.6
876	2006/06/18	09:55:48	47.4	31.0	31.4	32.2	36.9
881	2006/06/18	09:55:53	48.6	39.4	41.0	42.1	45.3
886	2006/06/18	09:55:58	50.0	55.3	67.9	71.4	65.2
891	2006/06/18	09:56:03	57.6	54.6	51.4	52.4	37.8
896	2006/06/18	09:56:08	34.2	33.0	32.9	35.8	45.5

- Freq Weight : A
- Time Weight : FAST
- Level Range : 40-100
- Max dB : 77.4 - 2006/06/18 10:15:06
- Level Range : 40-100
- SEL : 93.3
- Leq : 63.8
-

No.s	Date Time	(dB)				
1	2006/06/18 10:11:34	56.5	55.2	56.2	54.8	56.0
6	2006/06/18 10:11:39	56.7	56.7	54.6	54.5	53.5
11	2006/06/18 10:11:44	54.0	55.3	54.6	54.4	56.5
16	2006/06/18 10:11:49	54.5	53.3	55.2	52.8	52.6
21	2006/06/18 10:11:54	52.8	52.3	52.0	53.4	53.2
26	2006/06/18 10:11:59	52.2	52.7	53.0	51.3	51.4
31	2006/06/18 10:12:04	50.6	52.1	52.7	54.7	55.5
36	2006/06/18 10:12:09	54.0	49.8	49.8	49.0	48.5
41	2006/06/18 10:12:14	49.6	49.7	50.1	51.2	51.5
46	2006/06/18 10:12:19	50.0	48.9	51.9	51.7	52.9
51	2006/06/18 10:12:24	52.8	51.0	51.4	53.1	52.2
56	2006/06/18 10:12:29	50.7	50.6	48.7	49.5	50.0
61	2006/06/18 10:12:34	49.7	50.2	49.6	50.2	50.3
66	2006/06/18 10:12:39	50.4	51.8	51.7	50.4	48.9
71	2006/06/18 10:12:44	50.2	49.7	48.2	48.7	48.6
76	2006/06/18 10:12:49	49.3	48.9	50.5	51.2	51.1
81	2006/06/18 10:12:54	51.2	51.6	52.8	52.9	52.3
86	2006/06/18 10:12:59	52.0	52.5	52.8	52.1	53.1
91	2006/06/18 10:13:04	53.4	53.6	52.6	52.4	52.3
96	2006/06/18 10:13:09	53.2	53.0	53.1	53.8	53.6
101	2006/06/18 10:13:14	54.6	54.3	55.2	55.4	56.0
106	2006/06/18 10:13:19	57.5	57.8	56.0	55.1	54.6
111	2006/06/18 10:13:24	54.3	54.2	55.4	55.2	56.3
116	2006/06/18 10:13:29	54.4	55.2	55.4	54.6	55.7
121	2006/06/18 10:13:34	54.3	54.8	54.6	56.3	56.9
126	2006/06/18 10:13:39	56.1	55.1	55.2	54.6	56.4
131	2006/06/18 10:13:44	57.2	56.8	56.9	57.8	57.9
136	2006/06/18 10:13:49	57.1	57.2	57.2	57.1	57.2
141	2006/06/18 10:13:54	57.0	57.4	60.9	57.8	58.2
146	2006/06/18 10:13:59	58.6	57.9	59.2	62.3	65.4
151	2006/06/18 10:14:04	63.3	59.9	60.1	63.4	64.1
156	2006/06/18 10:14:09	61.3	60.1	62.2	61.6	62.8
161	2006/06/18 10:14:14	64.9	66.0	66.9	67.4	65.8
166	2006/06/18 10:14:19	66.8	65.4	66.2	64.8	65.9
171	2006/06/18 10:14:24	64.8	65.7	65.9	65.2	65.2
176	2006/06/18 10:14:29	64.2	62.1	62.3	63.4	66.2
181	2006/06/18 10:14:34	65.3	63.8	67.3	69.3	68.3
186	2006/06/18 10:14:39	67.8	67.9	67.9	68.0	66.8
191	2006/06/18 10:14:44	66.3	66.3	67.1	67.9	68.7
196	2006/06/18 10:14:49	68.9	70.4	70.0	72.2	72.6
201	2006/06/18 10:14:54	69.7	69.5	72.0	73.6	75.1
206	2006/06/18 10:14:59	75.1	75.6	75.2	75.6	75.3
211	2006/06/18 10:15:04	76.3	76.5	76.1	75.7	72.3
216	2006/06/18 10:15:09	71.4	69.6	71.6	73.8	71.0
221	2006/06/18 10:15:14	71.0	68.1	67.9	66.2	65.1
226	2006/06/18 10:15:19	66.8	65.6	65.3	64.6	64.8
231	2006/06/18 10:15:24	64.9	63.3	63.1	64.3	65.3
236	2006/06/18 10:15:29	67.6	65.6	67.6	66.9	65.4
241	2006/06/18 10:15:34	66.3	66.4	66.5	65.7	66.1
246	2006/06/18 10:15:39	67.1	66.8	65.9	66.9	65.0
251	2006/06/18 10:15:44	62.8	63.5	62.6	62.1	64.2
256	2006/06/18 10:15:49	65.8	63.1	62.4	63.6	66.6
261	2006/06/18 10:15:54	65.5	64.0	63.9	59.7	58.3
266	2006/06/18 10:15:59	62.7	60.9	58.6	60.6	59.8
271	2006/06/18 10:16:04	61.4	58.5	60.4	60.5	59.1
276	2006/06/18 10:16:09	58.2	57.9	58.5	57.3	57.5
281	2006/06/18 10:16:14	57.7	58.9	58.3	57.9	58.9
286	2006/06/18 10:16:19	56.2	55.6	56.6	56.8	56.7
291	2006/06/18 10:16:24	57.0	56.4	55.9	57.5	56.3
296	2006/06/18 10:16:29	55.8	54.6	56.3	57.3	58.5
301	2006/06/18 10:16:34	59.1	59.0	57.7	58.1	60.3
306	2006/06/18 10:16:39	57.2	57.4	55.2	53.9	54.7
311	2006/06/18 10:16:44	55.8	57.7	54.7	54.3	54.5
316	2006/06/18 10:16:49	54.8	54.4	55.4	52.9	53.6
321	2006/06/18 10:16:54	53.1	52.9	54.5	56.4	54.9
326	2006/06/18 10:16:59	52.5	53.3	52.1	52.3	51.7
331	2006/06/18 10:17:04	51.5	52.3	51.3	51.5	53.8
336	2006/06/18 10:17:09	53.3	53.8	53.9	54.6	53.7
341	2006/06/18 10:17:14	54.4	54.2	54.7	53.6	54.1
346	2006/06/18 10:17:19	54.7	53.8	52.9	52.3	51.4
351	2006/06/18 10:17:24	50.5	51.4	50.7	50.2	49.6
356	2006/06/18 10:17:29	49.2	50.0	50.7	50.5	51.9
361	2006/06/18 10:17:34	51.6	52.4	52.9	52.1	52.2
366	2006/06/18 10:17:39	52.3	52.0	51.5	50.5	50.0
371	2006/06/18 10:17:44	51.0	51.4	50.7	51.6	52.1
376	2006/06/18 10:17:49	51.8	52.0	51.3	50.8	50.4
381	2006/06/18 10:17:54	50.3	49.9	50.9	50.9	51.2
386	2006/06/18 10:17:59	52.0	51.9	51.1	52.3	54.9
391	2006/06/18 10:18:04	53.5	54.3	54.1	54.8	53.9
396	2006/06/18 10:18:09	54.3	53.1	52.1	53.3	54.2
401	2006/06/18 10:18:14	52.1	53.4	53.6	53.7	54.5
406	2006/06/18 10:18:19	54.4	54.0	55.0	56.7	57.5
411	2006/06/18 10:18:24	57.4	58.2	57.2	55.7	56.4
416	2006/06/18 10:18:29	55.4	53.4	53.2	53.7	56.1
421	2006/06/18 10:18:34	56.3	54.8	54.9	56.6	56.8

426	2006/06/18	10:18:39	54.5	55.3	56.2	59.4	59.3
431	2006/06/18	10:18:44	58.4	57.7	58.2	58.2	58.5
436	2006/06/18	10:18:49	60.9	57.8	59.8	59.2	58.1
441	2006/06/18	10:18:54	57.1	57.4	59.0	58.6	58.2
446	2006/06/18	10:18:59	59.1	59.4	60.2	61.4	62.1
451	2006/06/18	10:19:04	64.7	63.8	61.4	63.3	64.1
456	2006/06/18	10:19:09	63.0	61.9	62.8	61.2	61.8
461	2006/06/18	10:19:14	65.3	67.4	66.4	67.2	67.5
466	2006/06/18	10:19:19	66.5	66.4	67.1	68.2	69.0
471	2006/06/18	10:19:24	69.7	68.3	66.2	65.6	66.1
476	2006/06/18	10:19:29	66.3	67.9	70.6	70.3	69.9
481	2006/06/18	10:19:34	69.1	69.5	70.0	71.4	69.6
486	2006/06/18	10:19:39	71.6	72.1	72.1	71.9	70.8
491	2006/06/18	10:19:44	70.0	69.0	68.6	67.0	66.3
496	2006/06/18	10:19:49	65.4	66.6	66.6	68.3	68.8
501	2006/06/18	10:19:54	68.3	68.0	67.9	65.7	66.3
506	2006/06/18	10:19:59	67.0	67.0	66.5	66.3	65.9
511	2006/06/18	10:20:04	64.8	62.7	63.2	64.0	64.3
516	2006/06/18	10:20:09	65.4	65.0	64.0	64.9	65.3
521	2006/06/18	10:20:14	64.3	60.9	61.9	60.2	63.2
526	2006/06/18	10:20:19	60.8	60.2	61.3	60.9	58.4
531	2006/06/18	10:20:24	59.7	61.3	63.6	60.5	61.7
536	2006/06/18	10:20:29	60.0	57.1	58.1	58.6	59.4
541	2006/06/18	10:20:34	59.9	58.7	57.1	56.2	57.5
546	2006/06/18	10:20:39	57.0	58.6	57.1	56.2	57.2
551	2006/06/18	10:20:44	56.1	55.0	55.6	58.3	57.5
556	2006/06/18	10:20:49	57.9	59.4	60.9	59.3	57.7
561	2006/06/18	10:20:54	58.3	55.8	55.3	55.4	54.7
566	2006/06/18	10:20:59	55.4	54.8	55.6	55.4	56.0
571	2006/06/18	10:21:04	55.0	54.3	53.7	55.5	57.6
576	2006/06/18	10:21:09	56.7	54.1	53.3	52.5	51.9
581	2006/06/18	10:21:14	51.3	51.5	52.4	52.7	52.8
586	2006/06/18	10:21:19	51.8	51.2	51.5	52.2	54.1
591	2006/06/18	10:21:24	53.3	53.4	51.8	50.9	52.3
596	2006/06/18	10:21:29	50.6	51.5	51.0	51.0	51.1
601	2006/06/18	10:21:34	51.1	56.1	53.4	52.8	51.8
606	2006/06/18	10:21:39	50.5	51.0	50.9	49.6	51.8
611	2006/06/18	10:21:44	55.2	47.9	48.1	49.3	51.9
616	2006/06/18	10:21:49	54.2	50.5	53.8	54.2	53.9
621	2006/06/18	10:21:54	51.5	53.4	54.2	52.7	56.9
626	2006/06/18	10:21:59	52.3	51.8	52.0	50.7	51.2
631	2006/06/18	10:22:04	51.4	51.0	50.7	49.8	49.9
636	2006/06/18	10:22:09	51.3	50.1	49.5	49.4	49.9
641	2006/06/18	10:22:14	50.4	50.0	50.5	50.6	51.6
646	2006/06/18	10:22:19	50.8	49.9	51.6	50.4	51.3
651	2006/06/18	10:22:24	49.7	49.1	48.7	50.5	53.9
656	2006/06/18	10:22:29	55.0	49.6	49.8	51.7	53.6
661	2006/06/18	10:22:34	52.9	52.5	52.8	54.1	55.1
666	2006/06/18	10:22:39	53.3	52.7	52.3	51.7	51.9
671	2006/06/18	10:22:44	53.0	54.0	51.8	52.2	52.7
676	2006/06/18	10:22:49	53.0	54.1	55.1	56.0	54.7
681	2006/06/18	10:22:54	55.7	57.4	57.3	56.9	58.3
686	2006/06/18	10:22:59	56.4	56.1	54.9	54.2	55.3
691	2006/06/18	10:23:04	56.5	55.3	55.0	55.6	56.0
696	2006/06/18	10:23:09	56.2	55.9	57.2	57.7	57.9
701	2006/06/18	10:23:14	59.0	58.3	61.0	59.9	62.9
706	2006/06/18	10:23:19	62.7	62.4	61.4	61.7	60.8
711	2006/06/18	10:23:24	58.6	58.4	59.5	61.2	61.0
716	2006/06/18	10:23:29	62.6	63.3	62.1	66.3	65.7
721	2006/06/18	10:23:34	63.9	66.1	65.6	67.0	62.6
726	2006/06/18	10:23:39	63.7	64.0	64.7	66.8	68.4
731	2006/06/18	10:23:44	68.2	67.5	69.5	68.9	68.8
736	2006/06/18	10:23:49	69.8	69.7	71.8	72.4	71.1
741	2006/06/18	10:23:54	68.9	70.1	72.1	73.3	71.2
746	2006/06/18	10:23:59	70.4	71.3	72.5	73.1	73.4
751	2006/06/18	10:24:04	72.9	73.9	73.3	73.6	71.3
756	2006/06/18	10:24:09	68.8	69.5	70.7	71.4	70.2
761	2006/06/18	10:24:14	71.1	69.7	70.2	69.2	69.7
766	2006/06/18	10:24:19	70.2	67.2	68.5	68.9	65.6
771	2006/06/18	10:24:24	64.2	64.0	65.5	64.4	67.2
776	2006/06/18	10:24:29	68.1	66.7	65.9	67.9	63.5
781	2006/06/18	10:24:34	63.8	63.3	62.8	63.3	62.5
786	2006/06/18	10:24:39	61.1	61.0	62.5	61.9	63.3
791	2006/06/18	10:24:44	65.4	65.4	64.5	63.4	60.9
796	2006/06/18	10:24:49	60.8	60.0	59.4	60.7	58.4
801	2006/06/18	10:24:54	59.0	58.7	59.5	56.9	57.4
806	2006/06/18	10:24:59	60.2	59.0	57.3	56.8	57.4
811	2006/06/18	10:25:04	58.4	61.0	61.1	62.6	61.4
816	2006/06/18	10:25:09	58.6	56.9	56.3	55.2	55.3
821	2006/06/18	10:25:14	55.9	53.9	55.6	53.2	53.5
826	2006/06/18	10:25:19	53.4	53.7	57.8	54.5	55.2
831	2006/06/18	10:25:24	56.0	55.9	54.3	54.3	54.3
836	2006/06/18	10:25:29	55.4	52.5	52.8	53.2	52.1
841	2006/06/18	10:25:34	51.9	52.6	51.4	51.6	51.3
846	2006/06/18	10:25:39	52.5	52.7	53.0	51.2	52.5
851	2006/06/18	10:25:44	52.0	52.6	51.2	50.9	51.8
856	2006/06/18	10:25:49	51.3	52.5	53.6	53.4	54.3
861	2006/06/18	10:25:54	52.6	51.2	51.1	53.9	54.7
866	2006/06/18	10:25:59	55.6	54.5	54.8	54.3	53.5
871	2006/06/18	10:26:04	54.2	53.9	55.1	53.9	52.1
876	2006/06/18	10:26:09	53.2	53.6	54.4	53.4	55.6
881	2006/06/18	10:26:14	53.0	49.3	45.2	42.5	40.5
886	2006/06/18	10:26:19	39.1	39.3	37.7	37.3	37.0
891	2006/06/18	10:26:24	37.3	37.4	36.5	36.9	39.3
896	2006/06/18	10:26:29	39.4	39.1	38.7	39.2	39.9

- Freq Weight : A
- Time Weight : FAST
- Level Range : 40-100
- Max dB : 78.7 - 2006/06/18 10:40:50
- Level Range : 40-100
- SEL : 94.0
- Leq : 64.5
-

No.s	Date Time	(dB)				
1	2006/06/18 10:26:46	40.8	47.2	50.0	45.7	44.8
6	2006/06/18 10:26:51	43.0	43.9	44.0	42.6	42.6
11	2006/06/18 10:26:56	40.9	41.0	41.5	42.6	42.9
16	2006/06/18 10:27:01	42.9	42.9	42.1	42.7	43.6
21	2006/06/18 10:27:06	43.4	43.0	43.7	42.8	41.7
26	2006/06/18 10:27:11	42.4	42.1	44.3	42.3	43.4
31	2006/06/18 10:27:16	42.3	39.0	40.3	39.7	41.7
36	2006/06/18 10:27:21	40.5	39.6	40.4	40.2	40.3
41	2006/06/18 10:27:26	40.1	39.3	41.8	39.4	38.4
46	2006/06/18 10:27:31	38.4	39.6	39.2	40.8	42.1
51	2006/06/18 10:27:36	42.0	43.1	42.5	41.3	42.3
56	2006/06/18 10:27:41	39.5	40.8	42.3	43.2	43.1
61	2006/06/18 10:27:46	43.7	44.8	43.5	45.3	44.2
66	2006/06/18 10:27:51	43.0	42.5	44.5	42.4	42.7
71	2006/06/18 10:27:56	41.2	39.6	41.5	41.8	41.6
76	2006/06/18 10:28:01	39.2	38.7	40.8	38.2	38.8
81	2006/06/18 10:28:06	42.9	41.3	41.2	40.2	44.4
86	2006/06/18 10:28:11	42.1	42.7	43.3	42.9	41.1
91	2006/06/18 10:28:16	41.3	41.8	43.4	45.4	41.3
96	2006/06/18 10:28:21	41.7	42.2	43.3	43.0	43.4
101	2006/06/18 10:28:26	46.2	45.5	44.0	40.9	43.2
106	2006/06/18 10:28:31	39.9	39.9	40.5	42.7	40.0
111	2006/06/18 10:28:36	40.2	41.5	37.8	38.2	37.9
116	2006/06/18 10:28:41	38.1	41.6	38.2	37.9	38.0
121	2006/06/18 10:28:46	40.4	37.7	37.0	41.1	37.6
126	2006/06/18 10:28:51	41.2	37.9	38.3	38.4	37.3
131	2006/06/18 10:28:56	37.4	37.5	41.7	38.1	42.5
136	2006/06/18 10:29:01	37.2	38.1	45.2	38.7	39.3
141	2006/06/18 10:29:06	38.6	38.9	43.8	40.9	39.8
146	2006/06/18 10:29:11	38.8	39.5	38.6	37.9	37.6
151	2006/06/18 10:29:16	38.6	37.4	37.3	37.8	38.5
156	2006/06/18 10:29:21	38.4	38.0	38.0	39.1	38.7
161	2006/06/18 10:29:26	39.4	39.4	39.8	40.4	39.8
166	2006/06/18 10:29:31	40.8	38.9	40.9	41.3	42.3
171	2006/06/18 10:29:36	40.9	41.6	39.6	38.9	40.4
176	2006/06/18 10:29:41	41.4	40.6	42.1	42.8	42.9
181	2006/06/18 10:29:46	43.6	42.9	44.5	45.2	46.0
186	2006/06/18 10:29:51	44.8	43.9	43.2	44.0	43.9
191	2006/06/18 10:29:56	42.4	42.9	40.9	41.1	39.9
196	2006/06/18 10:30:01	38.9	38.1	38.0	37.2	37.1
201	2006/06/18 10:30:06	37.3	38.4	39.2	38.0	40.0
206	2006/06/18 10:30:11	39.4	38.5	39.6	41.5	42.2
211	2006/06/18 10:30:16	41.0	40.7	38.3	38.9	39.5
216	2006/06/18 10:30:21	39.1	39.3	39.5	41.0	40.5
221	2006/06/18 10:30:26	39.6	40.1	41.0	39.9	40.6
226	2006/06/18 10:30:31	39.9	40.6	39.1	40.0	41.0
231	2006/06/18 10:30:36	41.1	39.7	39.4	38.5	37.7
236	2006/06/18 10:30:41	38.2	38.9	38.9	42.1	40.5
241	2006/06/18 10:30:46	39.6	40.2	40.9	41.7	42.0
246	2006/06/18 10:30:51	40.3	40.5	42.1	42.2	40.5
251	2006/06/18 10:30:56	40.0	39.6	42.4	41.2	41.8
256	2006/06/18 10:31:01	40.0	38.4	39.4	39.6	40.3
261	2006/06/18 10:31:06	40.9	39.6	38.1	40.4	41.5
266	2006/06/18 10:31:11	40.8	41.2	39.2	41.1	40.6
271	2006/06/18 10:31:16	43.5	41.8	41.7	40.1	40.8
276	2006/06/18 10:31:21	42.2	42.5	41.7	42.8	43.3
281	2006/06/18 10:31:26	42.8	42.1	42.6	41.5	43.8
286	2006/06/18 10:31:31	42.5	42.4	42.2	42.7	42.2
291	2006/06/18 10:31:36	41.0	41.1	40.4	40.7	39.8
296	2006/06/18 10:31:41	40.3	43.0	38.7	38.9	39.8
301	2006/06/18 10:31:46	40.4	41.6	40.7	42.5	43.2
306	2006/06/18 10:31:51	41.6	44.7	42.1	41.7	41.1
311	2006/06/18 10:31:56	43.2	43.4	42.6	45.1	47.5
316	2006/06/18 10:32:01	43.3	42.9	42.1	41.3	42.4
321	2006/06/18 10:32:06	41.3	40.1	40.3	42.9	41.3
326	2006/06/18 10:32:11	42.3	38.0	38.1	36.8	37.2
331	2006/06/18 10:32:16	37.6	38.0	37.5	39.3	40.3
336	2006/06/18 10:32:21	39.3	38.5	39.4	39.6	40.9
341	2006/06/18 10:32:26	39.1	41.1	41.7	42.0	40.9
346	2006/06/18 10:32:31	42.5	40.7	40.2	39.0	39.6
351	2006/06/18 10:32:36	38.3	38.3	37.4	38.3	37.3
356	2006/06/18 10:32:41	37.2	37.7	37.5	38.0	40.1
361	2006/06/18 10:32:46	37.8	37.0	38.1	37.1	35.9
366	2006/06/18 10:32:51	37.9	37.8	37.3	38.4	38.0
371	2006/06/18 10:32:56	40.1	39.0	38.0	37.8	41.4
376	2006/06/18 10:33:01	41.7	38.8	39.3	38.8	40.4
381	2006/06/18 10:33:06	38.9	39.3	42.1	40.7	40.4
386	2006/06/18 10:33:11	42.1	41.8	42.2	42.5	43.7
391	2006/06/18 10:33:16	43.4	42.9	44.1	44.6	44.2
396	2006/06/18 10:33:21	44.4	44.5	45.2	46.1	45.3
401	2006/06/18 10:33:26	44.2	45.5	46.0	45.4	46.0
406	2006/06/18 10:33:31	46.6	46.8	45.6	44.1	43.3
411	2006/06/18 10:33:36	44.6	47.5	48.9	47.1	49.6
416	2006/06/18 10:33:41	49.1	47.8	46.8	45.7	45.3
421	2006/06/18 10:33:46	46.2	48.9	49.9	49.2	50.1

426	2006/06/18	10:33:51	48.5	48.6	47.4	48.5	49.6
431	2006/06/18	10:33:56	49.4	50.5	49.4	49.4	49.3
436	2006/06/18	10:34:01	50.1	49.3	48.8	50.0	49.5
441	2006/06/18	10:34:06	49.0	47.7	47.5	47.8	47.3
446	2006/06/18	10:34:11	46.8	49.0	47.8	47.4	50.2
451	2006/06/18	10:34:16	48.5	49.9	52.8	54.4	50.8
456	2006/06/18	10:34:21	51.8	51.9	51.4	50.8	52.2
461	2006/06/18	10:34:26	53.6	52.3	53.0	52.6	53.4
466	2006/06/18	10:34:31	53.0	53.8	54.1	53.9	53.7
471	2006/06/18	10:34:36	54.6	53.6	54.2	55.3	55.2
476	2006/06/18	10:34:41	55.5	56.3	57.4	56.1	55.2
481	2006/06/18	10:34:46	52.5	52.2	53.3	53.9	53.3
486	2006/06/18	10:34:51	52.6	52.4	50.8	51.7	50.0
491	2006/06/18	10:34:56	50.4	48.5	49.8	50.3	50.9
496	2006/06/18	10:35:01	51.4	51.5	51.5	50.6	51.9
501	2006/06/18	10:35:06	51.4	52.2	52.3	51.8	51.9
506	2006/06/18	10:35:11	52.1	53.3	51.9	54.0	54.2
511	2006/06/18	10:35:16	55.8	54.5	54.2	53.6	54.3
516	2006/06/18	10:35:21	54.8	55.3	55.6	54.3	54.3
521	2006/06/18	10:35:26	54.3	53.9	54.6	54.7	56.1
526	2006/06/18	10:35:31	57.7	57.1	56.7	58.6	59.3
531	2006/06/18	10:35:36	60.1	61.1	61.1	58.5	57.8
536	2006/06/18	10:35:41	57.4	57.1	58.9	58.4	57.9
541	2006/06/18	10:35:46	57.5	58.8	59.1	61.4	60.8
546	2006/06/18	10:35:51	62.1	63.2	64.0	64.6	65.7
551	2006/06/18	10:35:56	65.6	65.4	66.6	64.7	63.5
556	2006/06/18	10:36:01	62.9	63.8	64.6	67.2	65.9
561	2006/06/18	10:36:06	65.6	67.7	69.6	66.7	67.8
566	2006/06/18	10:36:11	67.8	67.3	66.2	67.6	66.2
571	2006/06/18	10:36:16	66.8	70.5	68.9	68.8	68.9
576	2006/06/18	10:36:21	70.4	69.7	72.9	72.9	73.0
581	2006/06/18	10:36:26	76.8	75.6	74.6	76.4	76.2
586	2006/06/18	10:36:31	76.3	76.6	76.0	77.1	76.7
591	2006/06/18	10:36:36	76.3	76.9	75.7	75.3	73.8
596	2006/06/18	10:36:41	72.9	72.1	70.8	71.7	70.6
601	2006/06/18	10:36:46	68.3	69.7	70.7	66.6	66.8
606	2006/06/18	10:36:51	67.8	67.3	69.0	70.3	70.5
611	2006/06/18	10:36:56	70.1	70.7	69.0	67.5	65.7
616	2006/06/18	10:37:01	66.1	65.4	63.8	63.3	63.9
621	2006/06/18	10:37:06	63.9	68.9	70.8	66.8	68.7
626	2006/06/18	10:37:11	66.5	64.2	64.5	62.7	62.3
631	2006/06/18	10:37:16	61.1	59.0	61.1	59.2	59.4
636	2006/06/18	10:37:21	61.8	60.7	60.6	60.3	59.6
641	2006/06/18	10:37:26	62.9	60.6	59.6	60.4	58.8
646	2006/06/18	10:37:31	58.0	56.9	57.5	57.7	56.5
651	2006/06/18	10:37:36	55.8	57.1	55.8	55.3	56.6
656	2006/06/18	10:37:41	55.1	55.2	55.0	54.2	55.4
661	2006/06/18	10:37:46	56.5	54.1	53.9	53.3	54.1
666	2006/06/18	10:37:51	53.9	54.1	52.4	54.6	53.5
671	2006/06/18	10:37:56	53.4	54.2	53.7	52.6	52.6
676	2006/06/18	10:38:01	54.2	52.6	52.4	52.1	51.5
681	2006/06/18	10:38:06	52.4	51.9	51.3	52.1	54.7
686	2006/06/18	10:38:11	54.8	53.9	54.5	53.9	54.4
691	2006/06/18	10:38:16	54.5	58.1	57.6	58.5	57.9
696	2006/06/18	10:38:21	57.1	57.5	56.4	55.2	55.1
701	2006/06/18	10:38:26	53.6	55.3	54.4	53.8	54.0
706	2006/06/18	10:38:31	53.1	54.4	52.5	52.6	52.6
711	2006/06/18	10:38:36	52.0	51.5	51.0	52.6	53.2
716	2006/06/18	10:38:41	51.5	49.5	49.0	48.7	49.2
721	2006/06/18	10:38:46	48.5	47.5	48.8	50.8	50.5
726	2006/06/18	10:38:51	52.6	50.6	49.2	49.8	50.6
731	2006/06/18	10:38:56	50.3	50.0	49.9	52.0	52.8
736	2006/06/18	10:39:01	53.6	52.2	52.5	52.4	52.0
741	2006/06/18	10:39:06	53.4	54.6	53.1	53.0	53.3
746	2006/06/18	10:39:11	53.2	53.2	53.5	54.2	54.4
751	2006/06/18	10:39:16	53.4	54.3	55.5	56.1	51.9
756	2006/06/18	10:39:21	49.2	49.0	48.4	52.1	51.6
761	2006/06/18	10:39:26	51.9	52.9	51.5	52.8	51.4
766	2006/06/18	10:39:31	51.8	52.9	53.8	52.8	55.5
771	2006/06/18	10:39:36	54.8	54.6	54.8	56.3	54.5
776	2006/06/18	10:39:41	52.6	53.7	54.9	53.0	53.5
781	2006/06/18	10:39:46	54.7	53.6	54.3	54.4	54.0
786	2006/06/18	10:39:51	56.2	54.8	55.2	55.8	55.5
791	2006/06/18	10:39:56	57.0	56.6	55.5	55.8	57.0
796	2006/06/18	10:40:01	56.3	58.6	58.4	58.2	60.9
801	2006/06/18	10:40:06	60.6	61.1	61.2	61.4	60.2
806	2006/06/18	10:40:11	60.3	60.9	61.1	61.2	61.9
811	2006/06/18	10:40:16	61.9	62.3	62.8	63.4	63.7
816	2006/06/18	10:40:21	65.0	65.5	68.8	68.7	68.3
821	2006/06/18	10:40:26	69.7	68.5	68.8	66.3	66.0
826	2006/06/18	10:40:31	65.6	65.9	67.2	66.7	68.1
831	2006/06/18	10:40:36	70.2	70.1	69.4	70.8	70.4
836	2006/06/18	10:40:41	69.1	67.0	67.6	71.5	69.9
841	2006/06/18	10:40:46	69.0	71.4	71.8	73.2	78.6
846	2006/06/18	10:40:51	76.9	74.0	72.5	75.5	74.7
851	2006/06/18	10:40:56	73.3	73.9	74.1	73.7	73.5
856	2006/06/18	10:41:01	75.6	77.5	75.0	75.8	75.8
861	2006/06/18	10:41:06	74.4	74.8	76.0	72.9	73.3
866	2006/06/18	10:41:11	70.8	72.5	70.8	70.0	71.3
871	2006/06/18	10:41:16	70.4	68.4	69.3	71.6	71.8
876	2006/06/18	10:41:21	71.5	71.4	70.9	68.6	68.8
881	2006/06/18	10:41:26	68.2	68.1	67.6	69.2	68.0
886	2006/06/18	10:41:31	73.1	74.1	73.0	72.0	69.0
891	2006/06/18	10:41:36	69.3	66.7	67.2	64.2	62.9
896	2006/06/18	10:41:41	64.1	63.5	64.3	63.8	62.6

- Freq Weight : A
- Time Weight : FAST
- Level Range : 40-100
- Max dB : 85.5 - 2006/06/18 10:57:36
- Level Range : 40-100
- SEL : 99.5
- Leq : 70.0
-

No.s	Date Time	(dB)				
1	2006/06/18 10:48:36	53.8	53.0	51.3	50.2	50.7
6	2006/06/18 10:48:41	49.6	50.4	49.8	47.9	46.2
11	2006/06/18 10:48:46	45.0	46.2	47.5	52.3	51.9
16	2006/06/18 10:48:51	42.2	43.9	46.6	44.1	43.7
21	2006/06/18 10:48:56	44.6	42.0	42.2	42.4	48.9
26	2006/06/18 10:49:01	54.3	50.2	43.6	43.7	43.6
31	2006/06/18 10:49:06	43.2	46.6	50.2	45.1	46.1
36	2006/06/18 10:49:11	46.7	54.0	55.5	51.2	51.5
41	2006/06/18 10:49:16	52.7	58.0	65.6	70.7	77.8
46	2006/06/18 10:49:21	79.4	71.4	66.3	61.5	56.1
51	2006/06/18 10:49:26	52.8	55.3	50.7	48.4	45.0
56	2006/06/18 10:49:31	44.2	44.6	53.5	54.9	44.9
61	2006/06/18 10:49:36	44.2	43.9	43.8	43.3	42.8
66	2006/06/18 10:49:41	54.6	48.1	42.6	44.1	44.3
71	2006/06/18 10:49:46	45.5	46.1	45.1	53.5	54.2
76	2006/06/18 10:49:51	43.6	43.3	43.5	43.7	45.4
81	2006/06/18 10:49:56	44.4	43.3	56.0	53.6	44.0
86	2006/06/18 10:50:01	44.5	43.9	46.1	46.0	50.2
91	2006/06/18 10:50:06	45.9	47.0	56.2	53.1	52.3
96	2006/06/18 10:50:11	56.4	62.5	65.9	70.8	77.0
101	2006/06/18 10:50:16	77.7	70.9	66.6	63.9	59.3
106	2006/06/18 10:50:21	54.5	51.4	48.7	47.1	46.4
111	2006/06/18 10:50:26	51.2	54.3	48.5	45.3	45.0
116	2006/06/18 10:50:31	45.6	44.7	44.9	46.7	50.9
121	2006/06/18 10:50:36	54.0	51.3	52.4	56.5	60.7
126	2006/06/18 10:50:41	68.2	75.0	80.3	83.1	75.5
131	2006/06/18 10:50:46	66.6	61.3	56.5	54.4	51.7
136	2006/06/18 10:50:51	53.4	51.4	50.2	51.2	50.3
141	2006/06/18 10:50:56	51.9	53.1	51.3	51.0	49.1
146	2006/06/18 10:51:01	51.7	47.6	46.1	46.7	46.1
151	2006/06/18 10:51:06	46.2	46.1	46.6	51.4	54.6
156	2006/06/18 10:51:11	47.9	49.1	49.3	51.5	49.6
161	2006/06/18 10:51:16	50.8	51.8	53.5	51.6	50.3
166	2006/06/18 10:51:21	54.5	60.9	65.2	70.6	78.8
171	2006/06/18 10:51:26	77.5	67.6	64.2	60.4	57.5
176	2006/06/18 10:51:31	55.7	52.9	51.9	55.8	60.9
181	2006/06/18 10:51:36	64.4	69.6	76.8	74.4	67.4
186	2006/06/18 10:51:41	60.8	58.9	57.5	53.8	56.7
191	2006/06/18 10:51:46	48.4	48.8	50.4	51.9	53.4
196	2006/06/18 10:51:51	44.8	45.1	45.6	48.0	44.7
201	2006/06/18 10:51:56	51.6	54.1	52.8	43.2	43.8
206	2006/06/18 10:52:01	42.7	42.6	45.3	48.7	56.1
211	2006/06/18 10:52:06	49.1	43.8	43.6	42.9	49.3
216	2006/06/18 10:52:11	47.6	53.2	57.9	49.3	45.0
221	2006/06/18 10:52:16	47.9	48.4	50.6	54.5	52.5
226	2006/06/18 10:52:21	56.6	61.9	65.2	70.6	75.0
231	2006/06/18 10:52:26	76.4	70.7	64.0	62.5	58.7
236	2006/06/18 10:52:31	58.2	65.1	71.4	78.8	69.4
241	2006/06/18 10:52:36	69.4	79.7	74.8	67.9	64.3
246	2006/06/18 10:52:41	57.3	55.2	51.2	51.9	54.3
251	2006/06/18 10:52:46	56.2	61.9	68.2	80.0	74.3
256	2006/06/18 10:52:51	67.2	63.6	58.6	58.7	57.2
261	2006/06/18 10:52:56	53.1	56.4	52.2	49.4	48.0
266	2006/06/18 10:53:01	47.6	51.9	51.8	55.3	49.1
271	2006/06/18 10:53:06	52.8	53.0	55.5	57.6	61.8
276	2006/06/18 10:53:11	64.6	68.1	74.8	79.1	76.1
281	2006/06/18 10:53:16	66.6	66.1	65.5	68.6	74.8
286	2006/06/18 10:53:21	76.0	68.7	62.8	59.4	55.0
291	2006/06/18 10:53:26	54.3	50.9	48.4	48.8	53.9
296	2006/06/18 10:53:31	57.8	64.7	74.1	77.1	66.6
301	2006/06/18 10:53:36	61.1	56.3	53.4	54.4	47.2
306	2006/06/18 10:53:41	46.4	47.2	48.1	48.5	48.5
311	2006/06/18 10:53:46	53.5	46.0	46.0	46.4	46.5
316	2006/06/18 10:53:51	46.0	50.2	46.9	47.1	49.7
321	2006/06/18 10:53:56	57.6	54.7	59.8	66.4	75.5
326	2006/06/18 10:54:01	79.2	72.3	68.4	66.0	58.4
331	2006/06/18 10:54:06	56.2	59.4	64.3	70.9	80.7
336	2006/06/18 10:54:11	78.1	75.2	78.7	72.0	79.4
341	2006/06/18 10:54:16	71.3	64.9	62.8	58.4	54.5
346	2006/06/18 10:54:21	55.8	53.9	57.6	54.4	51.1
351	2006/06/18 10:54:26	52.6	52.9	54.4	58.4	65.0
356	2006/06/18 10:54:31	68.5	73.5	77.2	70.9	62.4
361	2006/06/18 10:54:36	62.1	64.3	70.4	80.9	77.2
366	2006/06/18 10:54:41	70.9	66.1	58.6	54.2	51.1
371	2006/06/18 10:54:46	50.5	50.7	52.4	52.5	49.7
376	2006/06/18 10:54:51	51.1	50.8	50.7	49.2	47.8
381	2006/06/18 10:54:56	46.6	46.5	48.4	51.0	52.0
386	2006/06/18 10:55:01	48.1	49.7	49.4	51.3	51.4
391	2006/06/18 10:55:06	53.1	56.0	59.1	63.4	68.5
396	2006/06/18 10:55:11	72.9	75.4	72.7	64.4	62.2
401	2006/06/18 10:55:16	60.9	63.3	68.4	69.2	79.0
406	2006/06/18 10:55:21	82.6	74.0	68.4	63.7	58.3
411	2006/06/18 10:55:26	53.5	48.9	49.7	58.4	50.5
416	2006/06/18 10:55:31	52.2	45.9	46.4	50.0	48.3
421	2006/06/18 10:55:36	48.5	44.7	44.2	44.2	44.5

426	2006/06/18	10:55:41	47.7	48.9	49.9	53.0	54.2
431	2006/06/18	10:55:46	59.0	67.0	74.3	81.0	72.4
436	2006/06/18	10:55:51	67.4	60.0	54.5	51.1	48.9
441	2006/06/18	10:55:56	48.4	48.9	47.2	48.5	48.4
446	2006/06/18	10:56:01	49.4	48.0	47.4	48.7	46.9
451	2006/06/18	10:56:06	45.1	44.8	45.4	46.6	47.0
456	2006/06/18	10:56:11	46.0	45.3	44.4	44.6	45.1
461	2006/06/18	10:56:16	44.1	44.6	47.8	43.9	43.7
466	2006/06/18	10:56:21	43.0	43.5	45.0	47.1	44.8
471	2006/06/18	10:56:26	45.8	45.8	45.2	45.2	44.9
476	2006/06/18	10:56:31	45.1	44.4	45.1	44.6	46.0
481	2006/06/18	10:56:36	47.9	45.6	47.7	46.4	48.0
486	2006/06/18	10:56:41	51.2	53.1	55.4	58.5	62.2
491	2006/06/18	10:56:46	65.7	71.2	78.2	77.1	69.1
496	2006/06/18	10:56:51	64.7	61.5	57.9	53.8	50.4
501	2006/06/18	10:56:56	49.9	48.8	48.5	47.8	47.3
506	2006/06/18	10:57:01	49.2	49.4	50.1	54.7	59.3
511	2006/06/18	10:57:06	67.1	79.7	74.3	68.6	67.4
516	2006/06/18	10:57:11	73.6	77.1	70.3	61.4	57.8
521	2006/06/18	10:57:16	53.2	53.0	51.8	54.7	58.7
526	2006/06/18	10:57:21	60.8	65.4	72.2	76.7	74.8
531	2006/06/18	10:57:26	64.6	61.6	57.2	54.2	55.3
536	2006/06/18	10:57:31	54.8	58.2	62.9	70.5	82.4
541	2006/06/18	10:57:36	80.8	76.2	76.8	69.0	69.9
546	2006/06/18	10:57:41	75.4	82.9	80.6	71.7	68.4
551	2006/06/18	10:57:46	61.8	60.5	65.1	67.7	72.0
556	2006/06/18	10:57:51	77.5	77.4	82.2	75.8	70.6
561	2006/06/18	10:57:56	64.5	58.9	58.9	66.5	77.7
566	2006/06/18	10:58:01	77.5	69.7	65.7	68.5	73.9
571	2006/06/18	10:58:06	78.9	76.6	64.3	61.8	56.4
576	2006/06/18	10:58:11	52.8	49.7	48.4	47.4	47.8
581	2006/06/18	10:58:16	48.6	49.1	49.0	49.3	50.5
586	2006/06/18	10:58:21	50.1	52.4	57.6	63.6	65.9
591	2006/06/18	10:58:26	69.4	75.0	74.9	71.2	62.7
596	2006/06/18	10:58:31	59.6	57.3	53.3	50.7	47.9
601	2006/06/18	10:58:36	47.1	47.2	46.9	46.6	45.5
606	2006/06/18	10:58:41	45.4	46.7	47.6	47.1	47.9
611	2006/06/18	10:58:46	47.8	46.1	45.4	45.0	48.5
616	2006/06/18	10:58:51	45.3	45.5	46.1	47.5	46.0
621	2006/06/18	10:58:56	47.4	47.2	49.0	51.7	56.8
626	2006/06/18	10:59:01	60.4	64.7	69.3	75.7	73.9
631	2006/06/18	10:59:06	68.2	61.7	57.6	52.5	51.0
636	2006/06/18	10:59:11	50.8	48.3	51.5	55.2	63.8
641	2006/06/18	10:59:16	70.0	80.1	72.0	69.2	74.1
646	2006/06/18	10:59:21	77.8	67.5	62.0	57.9	53.3
651	2006/06/18	10:59:26	52.5	50.3	51.1	50.1	47.1
656	2006/06/18	10:59:31	47.0	47.4	51.3	57.8	66.9
661	2006/06/18	10:59:36	84.6	71.2	61.4	55.1	51.8
666	2006/06/18	10:59:41	53.1	53.7	55.0	59.6	64.9
671	2006/06/18	10:59:46	73.7	83.9	77.1	71.3	66.0
676	2006/06/18	10:59:51	61.0	60.1	58.7	56.3	59.2
681	2006/06/18	10:59:56	55.2	50.6	48.8	47.7	47.6
686	2006/06/18	11:00:01	50.3	44.6	44.3	44.1	44.8
691	2006/06/18	11:00:06	45.2	46.4	50.4	47.7	49.5
696	2006/06/18	11:00:11	51.0	51.6	55.1	61.3	67.6
701	2006/06/18	11:00:16	74.7	80.1	70.9	65.8	61.2
706	2006/06/18	11:00:21	56.7	52.2	47.6	46.2	44.7
711	2006/06/18	11:00:26	44.6	43.2	44.6	45.4	44.6
716	2006/06/18	11:00:31	45.4	44.6	45.9	46.4	47.5
721	2006/06/18	11:00:36	49.4	51.1	56.2	63.0	72.3
726	2006/06/18	11:00:41	81.9	80.5	74.2	75.9	80.0
731	2006/06/18	11:00:46	70.9	66.0	60.9	56.0	53.4
736	2006/06/18	11:00:51	52.7	54.1	49.5	49.6	47.6
741	2006/06/18	11:00:56	49.1	49.3	49.6	52.2	57.2
746	2006/06/18	11:01:01	65.1	73.0	84.3	76.3	72.0
751	2006/06/18	11:01:06	65.9	60.4	59.4	67.6	73.6
756	2006/06/18	11:01:11	82.1	72.1	67.3	62.5	57.3
761	2006/06/18	11:01:16	53.9	51.0	52.0	49.8	47.5
766	2006/06/18	11:01:21	47.6	48.5	46.1	46.8	46.7
771	2006/06/18	11:01:26	47.0	49.7	49.7	46.5	50.9
776	2006/06/18	11:01:31	50.4	52.6	53.7	55.0	57.2
781	2006/06/18	11:01:36	60.7	64.0	68.3	71.5	75.8
786	2006/06/18	11:01:41	80.5	82.4	75.9	69.5	65.9
791	2006/06/18	11:01:46	62.5	58.8	54.7	51.9	52.7
796	2006/06/18	11:01:51	57.1	64.7	69.3	78.9	68.5
801	2006/06/18	11:01:56	63.6	60.6	54.4	50.7	49.1
806	2006/06/18	11:02:01	47.4	46.7	48.2	49.3	47.6
811	2006/06/18	11:02:06	49.8	50.9	51.9	53.7	56.1
816	2006/06/18	11:02:11	62.5	66.0	72.4	79.8	78.5
821	2006/06/18	11:02:16	67.2	64.6	60.4	52.6	50.4
826	2006/06/18	11:02:21	48.9	47.0	45.7	48.5	48.3
831	2006/06/18	11:02:26	45.1	43.6	42.9	44.9	46.2
836	2006/06/18	11:02:31	49.9	51.4	51.5	53.7	49.9
841	2006/06/18	11:02:36	50.3	50.6	50.8	53.2	55.1
846	2006/06/18	11:02:41	58.2	62.3	67.8	72.8	78.9
851	2006/06/18	11:02:46	83.2	76.9	69.7	65.5	60.6
856	2006/06/18	11:02:51	57.1	54.1	51.5	52.1	50.7
861	2006/06/18	11:02:56	48.4	50.8	46.5	46.7	50.7
866	2006/06/18	11:03:01	51.7	52.5	48.0	46.3	49.0
871	2006/06/18	11:03:06	49.8	46.3	47.0	49.9	49.4
876	2006/06/18	11:03:11	51.1	52.8	58.5	65.9	72.8
881	2006/06/18	11:03:16	80.8	73.2	77.8	80.1	71.0
886	2006/06/18	11:03:21	66.1	59.5	55.3	55.0	54.4
891	2006/06/18	11:03:26	54.3	52.8	53.8	60.1	67.8
896	2006/06/18	11:03:31	77.5	79.1	70.7	66.3	60.0

- Freq Weight : A
- Time Weight : FAST
- Level Range : 40-100
- Max dB : 100.4 - 2009/04/01 19:05:56
- Level Range : 40-100
- SEL : 119.3
- Leq : 70.0
-

No.s	Date Time	(dB)				
1	2009/04/01 00:05:48	63.6	59.8	57.7	45.7	47.5
6	2009/04/01 00:06:03	43.6	61.7	61.5	49.4	37.9
11	2009/04/01 00:06:18	50.0	40.8	50.6	38.5	41.2
16	2009/04/01 00:06:33	47.5	43.7	49.0	52.3	55.9
21	2009/04/01 00:06:48	69.4	71.9	66.2	56.8	73.1
26	2009/04/01 00:07:03	63.5	80.0	83.3	54.7	56.6
31	2009/04/01 00:07:18	52.9	56.9	57.5	50.3	51.2
36	2009/04/01 00:07:33	51.0	63.1	63.0	51.1	48.9
41	2009/04/01 00:07:48	51.8	49.0	42.8	42.0	41.6
46	2009/04/01 00:08:03	44.9	43.7	46.9	49.0	51.6
51	2009/04/01 00:08:18	53.7	60.5	75.3	71.4	57.6
56	2009/04/01 00:08:33	52.0	47.5	44.8	41.3	39.3
61	2009/04/01 00:08:48	36.3	42.0	44.9	50.0	56.0
66	2009/04/01 00:09:03	59.8	75.1	55.9	56.7	52.0
71	2009/04/01 00:09:18	52.4	52.2	56.2	75.1	55.9
76	2009/04/01 00:09:33	53.3	50.3	53.1	59.2	52.0
81	2009/04/01 00:09:48	50.2	50.3	41.4	39.6	44.4
86	2009/04/01 00:10:03	39.4	40.9	38.7	38.8	39.7
91	2009/04/01 00:10:18	35.3	36.2	39.1	46.8	50.0
96	2009/04/01 00:10:33	54.4	62.4	69.6	52.2	52.4
101	2009/04/01 00:10:48	65.9	71.1	54.5	50.5	51.4
106	2009/04/01 00:11:03	51.7	59.4	70.9	51.6	47.9
111	2009/04/01 00:11:18	47.1	52.8	55.2	71.1	75.6
116	2009/04/01 00:11:33	61.6	58.1	65.9	81.3	77.8
121	2009/04/01 00:11:48	70.3	64.8	70.1	64.4	70.9
126	2009/04/01 00:12:03	74.9	66.6	57.8	59.4	64.5
131	2009/04/01 00:12:18	69.7	68.4	52.8	55.3	50.7
136	2009/04/01 00:12:33	42.5	40.2	41.5	43.3	56.3
141	2009/04/01 00:12:48	58.5	71.1	58.8	55.8	58.2
146	2009/04/01 00:13:03	45.5	43.4	39.0	41.3	38.4
151	2009/04/01 00:13:18	38.2	40.9	44.4	52.3	57.9
156	2009/04/01 00:13:33	72.0	59.0	54.9	48.8	42.0
161	2009/04/01 00:13:48	38.9	37.6	47.0	36.6	34.7
166	2009/04/01 00:14:03	35.4	53.5	36.2	39.7	46.3
171	2009/04/01 00:14:18	53.8	53.0	53.4	65.4	77.6
176	2009/04/01 00:14:33	59.1	49.8	50.5	52.5	72.3
181	2009/04/01 00:14:48	65.2	53.9	53.4	46.6	48.9
186	2009/04/01 00:15:03	43.8	48.0	41.4	45.2	44.0
191	2009/04/01 00:15:18	46.1	43.5	43.8	43.5	47.4
196	2009/04/01 00:15:33	44.3	47.7	53.3	55.0	66.3
201	2009/04/01 00:15:48	73.5	69.0	66.4	56.4	73.8
206	2009/04/01 00:16:03	58.2	50.6	49.8	46.3	40.4
211	2009/04/01 00:16:18	41.2	47.2	53.8	65.6	67.2
216	2009/04/01 00:16:33	72.7	57.9	54.7	50.0	45.2
221	2009/04/01 00:16:48	49.9	60.1	62.7	72.2	60.6
226	2009/04/01 00:17:03	60.9	51.8	58.3	62.2	73.2
231	2009/04/01 00:17:18	72.5	58.4	56.1	49.7	47.1
236	2009/04/01 00:17:33	42.1	37.9	36.5	35.7	39.6
241	2009/04/01 00:17:48	43.4	40.5	41.3	40.4	41.6
246	2009/04/01 00:18:03	37.9	39.4	43.1	45.8	59.6
251	2009/04/01 00:18:18	64.1	78.2	63.8	59.6	54.4
256	2009/04/01 00:18:33	55.9	69.8	60.6	53.3	52.3
261	2009/04/01 00:18:48	43.8	44.8	38.9	38.4	38.5
266	2009/04/01 00:19:03	38.4	41.7	41.9	41.1	44.8
271	2009/04/01 00:19:18	52.0	55.7	69.8	68.8	56.5
276	2009/04/01 00:19:33	55.1	54.7	42.2	40.1	38.6
281	2009/04/01 00:19:48	47.3	35.9	40.1	44.3	54.5
286	2009/04/01 00:20:03	58.2	70.4	58.0	56.6	60.9
291	2009/04/01 00:20:18	78.3	56.9	49.8	51.6	45.9
296	2009/04/01 00:20:33	45.0	49.2	50.7	56.0	69.0
301	2009/04/01 00:20:48	72.0	69.5	75.6	60.6	51.8
306	2009/04/01 00:21:03	47.2	45.3	42.8	40.7	40.2
311	2009/04/01 00:21:18	41.3	51.0	49.2	54.3	66.5
316	2009/04/01 00:21:33	67.9	53.1	51.2	60.5	72.7
321	2009/04/01 00:21:48	59.7	55.5	48.4	43.3	44.9
326	2009/04/01 00:22:03	46.2	41.5	38.3	40.9	42.3
331	2009/04/01 00:22:18	45.5	49.8	54.1	66.1	66.0
336	2009/04/01 00:22:33	50.8	49.1	45.0	45.1	42.1
341	2009/04/01 00:22:48	41.9	41.5	38.3	38.1	39.8
346	2009/04/01 00:23:03	44.3	51.6	52.5	56.5	76.9
351	2009/04/01 00:23:18	73.0	55.8	55.4	46.8	47.7
356	2009/04/01 00:23:33	49.9	52.9	55.2	73.9	61.2
361	2009/04/01 00:23:48	52.8	51.0	45.7	46.2	38.1
366	2009/04/01 00:24:03	38.9	35.2	36.1	34.5	46.9
371	2009/04/01 00:24:18	37.2	39.5	39.1	42.7	48.1
376	2009/04/01 00:24:33	44.1	44.2	42.8	46.5	52.5
381	2009/04/01 00:24:48	54.1	62.2	66.0	53.5	57.6
386	2009/04/01 00:25:03	77.3	60.7	67.5	77.2	58.4
391	2009/04/01 00:25:18	61.7	55.5	55.4	58.6	70.8
396	2009/04/01 00:25:33	59.9	64.4	75.5	58.2	60.4
401	2009/04/01 00:25:48	52.1	63.0	76.3	72.3	78.5
406	2009/04/01 00:26:03	59.2	56.5	57.0	55.1	59.0
411	2009/04/01 00:26:18	73.7	65.6	56.7	61.4	75.7
416	2009/04/01 00:26:33	65.9	57.1	73.7	58.6	60.9
421	2009/04/01 00:26:48	73.2	64.6	56.6	54.5	63.5

426	2009/04/01	00:27:03	70.8	55.1	52.1	45.7	53.9
431	2009/04/01	00:27:18	57.6	71.3	66.3	53.9	59.1
436	2009/04/01	00:27:33	68.2	71.3	54.7	54.7	53.2
441	2009/04/01	00:27:48	61.4	65.6	72.1	62.4	56.3
446	2009/04/01	00:28:03	58.8	55.7	64.5	70.2	52.4
451	2009/04/01	00:28:18	50.6	45.3	50.5	46.0	46.1
456	2009/04/01	00:28:33	37.3	39.6	47.1	54.6	53.8
461	2009/04/01	00:28:48	67.2	61.4	53.7	55.9	70.0
466	2009/04/01	00:29:03	65.6	51.4	50.5	52.9	57.9
471	2009/04/01	00:29:18	74.7	66.4	59.9	62.3	81.0
476	2009/04/01	00:29:33	59.8	54.0	54.9	46.6	39.6
481	2009/04/01	00:29:48	43.4	43.2	45.4	55.5	58.2
486	2009/04/01	00:30:03	70.6	70.9	75.2	59.0	54.0
491	2009/04/01	00:30:18	55.0	47.4	48.3	45.1	49.4
496	2009/04/01	00:30:33	56.3	58.5	65.6	72.8	72.1
501	2009/04/01	00:30:48	56.0	54.3	50.6	44.1	51.6
506	2009/04/01	00:31:03	49.0	57.5	65.4	77.7	57.8
511	2009/04/01	00:31:18	54.3	48.8	48.0	50.5	56.7
516	2009/04/01	00:31:33	66.5	53.4	45.9	44.7	47.3
521	2009/04/01	00:31:48	51.6	55.4	71.7	60.3	53.2
526	2009/04/01	00:32:03	71.4	71.8	55.2	55.2	43.0
531	2009/04/01	00:32:18	43.2	44.0	52.9	54.5	62.0
536	2009/04/01	00:32:33	73.1	61.5	55.5	55.1	60.9
541	2009/04/01	00:32:48	72.2	76.1	77.8	62.9	59.0
546	2009/04/01	00:33:03	50.2	46.7	46.2	51.1	57.9
551	2009/04/01	00:33:18	71.4	73.1	62.6	56.7	52.3
556	2009/04/01	00:33:33	48.6	46.3	41.3	43.9	45.2
561	2009/04/01	00:33:48	35.4	40.7	38.7	42.2	34.9
566	2009/04/01	00:34:03	42.4	42.7	46.8	48.4	51.5
571	2009/04/01	00:34:18	49.6	57.7	70.8	51.5	50.0
576	2009/04/01	00:34:33	44.1	43.9	43.0	42.5	47.1
581	2009/04/01	00:34:48	50.0	60.1	68.6	78.2	72.9
586	2009/04/01	00:35:03	62.2	58.1	65.0	72.9	75.6
591	2009/04/01	00:35:18	58.2	54.9	51.1	47.6	43.1
596	2009/04/01	00:35:33	40.6	43.7	42.9	48.5	50.4
601	2009/04/01	00:35:48	49.6	41.6	51.3	55.4	65.0
606	2009/04/01	00:36:03	72.1	59.5	57.1	53.6	47.0
611	2009/04/01	00:36:18	42.5	44.2	53.6	50.4	56.8
616	2009/04/01	00:36:33	65.1	76.4	63.8	58.4	73.7
621	2009/04/01	00:36:48	66.6	54.0	53.8	59.4	70.7
626	2009/04/01	00:37:03	73.3	55.6	56.5	49.9	46.9
631	2009/04/01	00:37:18	39.8	35.4	35.5	52.4	46.7
636	2009/04/01	00:37:33	38.4	35.5	37.2	43.7	51.2
641	2009/04/01	00:37:48	53.1	57.1	68.5	53.3	58.8
646	2009/04/01	00:38:03	61.7	70.8	70.5	66.1	54.6
651	2009/04/01	00:38:18	50.0	47.4	43.1	48.5	47.3
656	2009/04/01	00:38:33	47.6	48.5	48.3	48.8	40.0
661	2009/04/01	00:38:48	43.8	42.6	43.1	47.0	42.6
666	2009/04/01	00:39:03	48.9	56.8	42.0	49.0	39.1
671	2009/04/01	00:39:18	48.0	46.2	51.1	57.4	71.9
676	2009/04/01	00:39:33	62.0	51.3	54.9	65.5	63.8
681	2009/04/01	00:39:48	63.2	67.5	51.7	54.7	45.4
686	2009/04/01	00:40:03	45.8	53.5	39.7	42.7	56.1
691	2009/04/01	00:40:18	49.5	51.1	66.4	65.4	60.8
696	2009/04/01	00:40:33	73.0	57.1	51.9	51.0	48.8
701	2009/04/01	00:40:48	55.4	57.8	43.8	48.3	48.4
706	2009/04/01	00:41:03	56.7	57.6	66.9	56.9	54.9
711	2009/04/01	00:41:18	67.8	60.4	63.4	65.3	53.4
716	2009/04/01	00:41:33	54.3	48.3	49.0	52.8	60.7
721	2009/04/01	00:41:48	71.9	58.3	57.2	61.2	67.2
726	2009/04/01	00:42:03	76.3	61.9	72.6	55.7	55.1
731	2009/04/01	00:42:18	53.2	57.5	61.9	68.3	49.0
736	2009/04/01	00:42:33	52.3	47.2	45.8	49.4	42.1
741	2009/04/01	00:42:48	46.6	37.2	40.0	44.3	41.7
746	2009/04/01	00:43:03	42.1	42.1	42.6	51.6	60.0
751	2009/04/01	00:43:18	65.7	55.0	60.3	72.2	58.8
756	2009/04/01	00:43:33	58.4	56.3	70.9	73.4	65.6
761	2009/04/01	00:43:48	55.9	53.6	57.3	45.3	44.2
766	2009/04/01	00:44:03	46.7	51.5	52.7	59.1	80.0
771	2009/04/01	00:44:18	71.2	72.5	65.9	61.4	58.3
776	2009/04/01	00:44:33	59.6	46.6	44.3	58.0	48.1
781	2009/04/01	00:44:48	56.2	73.6	58.1	57.1	63.8
786	2009/04/01	00:45:03	75.6	61.8	56.2	50.5	41.6
791	2009/04/01	00:45:18	39.1	40.5	36.5	38.4	56.8
796	2009/04/01	00:45:33	52.5	52.5	63.5	73.1	58.1
801	2009/04/01	00:45:48	68.8	73.9	69.6	70.9	71.2
806	2009/04/01	00:46:03	67.1	66.1	71.8	68.9	53.4
811	2009/04/01	00:46:18	49.4	45.1	44.6	43.6	48.0
816	2009/04/01	00:46:33	55.9	51.4	53.4	59.8	67.9
821	2009/04/01	00:46:48	74.7	65.3	59.9	58.8	77.2
826	2009/04/01	00:47:03	69.6	54.0	54.3	53.7	52.4
831	2009/04/01	00:47:18	41.6	38.1	38.5	40.2	49.5
836	2009/04/01	00:47:33	46.3	46.5	57.1	78.0	59.6
841	2009/04/01	00:47:48	51.8	46.6	46.0	41.8	42.9
846	2009/04/01	00:48:03	51.7	34.0	34.2	38.5	50.2
851	2009/04/01	00:48:18	44.6	56.5	62.4	69.8	71.5
856	2009/04/01	00:48:33	66.3	55.3	54.0	54.2	66.2
861	2009/04/01	00:48:48	74.4	56.8	54.7	52.9	47.2
866	2009/04/01	00:49:03	53.7	60.7	73.7	57.8	64.8
871	2009/04/01	00:49:18	68.5	51.1	55.2	56.3	70.3
876	2009/04/01	00:49:33	68.1	63.3	52.0	47.6	49.4
881	2009/04/01	00:49:48	49.4	56.8	74.8	53.4	47.2
886	2009/04/01	00:50:03	43.3	50.9	48.4	52.7	70.3
891	2009/04/01	00:50:18	63.7	74.2	56.7	52.8	51.7
896	2009/04/01	00:50:33	57.4	69.6	65.6	52.6	47.9
901	2009/04/01	00:50:48	45.5	45.8	45.8	40.4	47.8
906	2009/04/01	00:51:03	46.7	58.1	59.0	71.9	74.9
911	2009/04/01	00:51:18	59.7	57.6	52.4	47.4	53.3
916	2009/04/01	00:51:33	55.2	61.9	78.8	61.0	55.8

921	2009/04/01	00:51:48	50.5	52.7	60.1	68.3	61.2
926	2009/04/01	00:52:03	72.6	60.4	60.3	62.3	80.7
931	2009/04/01	00:52:18	73.9	66.4	53.5	56.7	44.0
936	2009/04/01	00:52:33	43.5	47.5	49.4	48.4	56.6
941	2009/04/01	00:52:48	65.7	72.4	64.0	68.2	52.6
946	2009/04/01	00:53:03	53.2	54.1	59.4	72.8	56.5
951	2009/04/01	00:53:18	55.0	49.7	59.5	68.2	74.9
956	2009/04/01	00:53:33	62.0	54.9	45.2	41.7	38.4
961	2009/04/01	00:53:48	43.1	43.5	46.0	57.7	56.3
966	2009/04/01	00:54:03	64.0	71.9	71.5	56.5	50.0
971	2009/04/01	00:54:18	46.9	50.8	48.8	53.1	66.1
976	2009/04/01	00:54:33	63.8	74.0	53.8	51.9	48.6
981	2009/04/01	00:54:48	51.6	57.2	67.2	72.3	61.2
986	2009/04/01	00:55:03	75.7	56.2	53.8	54.8	54.0
991	2009/04/01	00:55:18	66.3	62.9	58.4	70.2	64.8
996	2009/04/01	00:55:33	51.8	51.2	43.1	39.2	38.1
1001	2009/04/01	00:55:48	37.2	33.8	36.4	34.3	39.4
1006	2009/04/01	00:56:03	40.0	48.6	52.6	57.1	66.7
1011	2009/04/01	00:56:18	69.1	54.3	53.5	65.8	62.1
1016	2009/04/01	00:56:33	47.9	46.4	44.5	45.4	46.8
1021	2009/04/01	00:56:48	54.2	53.5	60.6	72.9	67.6
1026	2009/04/01	00:57:03	67.4	56.2	53.3	60.9	68.0
1031	2009/04/01	00:57:18	58.9	58.6	70.3	54.8	49.1
1036	2009/04/01	00:57:33	46.8	45.4	43.4	39.1	44.2
1041	2009/04/01	00:57:48	43.7	50.2	53.7	64.0	67.0
1046	2009/04/01	00:58:03	50.4	47.3	44.8	42.4	38.1
1051	2009/04/01	00:58:18	40.5	46.1	49.9	52.7	68.5
1056	2009/04/01	00:58:33	61.4	61.1	72.5	65.6	57.8
1061	2009/04/01	00:58:48	50.3	50.0	49.5	48.0	53.1
1066	2009/04/01	00:59:03	58.5	73.0	67.2	70.3	56.6
1071	2009/04/01	00:59:18	61.2	63.0	76.3	68.3	67.3
1076	2009/04/01	00:59:33	54.6	48.9	45.9	42.8	37.7
1081	2009/04/01	00:59:48	37.4	36.1	35.7	36.4	45.8
1086	2009/04/01	01:00:03	35.3	36.5	36.2	41.5	44.7
1091	2009/04/01	01:00:18	53.9	57.1	72.2	59.3	52.0
1096	2009/04/01	01:00:33	54.2	59.3	71.5	74.6	72.2
1101	2009/04/01	01:00:48	59.3	55.5	51.4	46.8	44.7
1106	2009/04/01	01:01:03	45.5	53.7	50.9	56.2	72.3
1111	2009/04/01	01:01:18	54.0	54.8	55.0	74.8	73.8
1116	2009/04/01	01:01:33	54.8	48.6	45.2	43.0	42.7
1121	2009/04/01	01:01:48	45.7	48.3	53.8	56.5	71.2
1126	2009/04/01	01:02:03	57.4	51.7	45.0	43.6	46.3
1131	2009/04/01	01:02:18	40.1	49.4	47.5	52.7	66.0
1136	2009/04/01	01:02:33	68.6	53.3	49.6	44.8	47.8
1141	2009/04/01	01:02:48	50.0	53.8	61.9	67.9	69.7
1146	2009/04/01	01:03:03	57.9	74.1	74.8	62.5	71.0
1151	2009/04/01	01:03:18	56.8	53.5	48.2	45.6	44.3
1156	2009/04/01	01:03:33	44.8	43.7	42.9	43.2	49.1
1161	2009/04/01	01:03:48	43.8	45.3	49.1	50.7	50.2
1166	2009/04/01	01:04:03	53.0	56.3	58.4	69.4	75.7
1171	2009/04/01	01:04:18	76.5	78.6	71.4	69.1	66.8
1176	2009/04/01	01:04:33	70.3	73.2	71.7	69.6	72.3
1181	2009/04/01	01:04:48	76.6	70.9	71.6	70.9	76.8
1186	2009/04/01	01:05:03	66.1	53.2	52.2	51.9	50.9
1191	2009/04/01	01:05:18	49.1	51.1	56.7	72.6	56.8
1196	2009/04/01	01:05:33	55.0	65.8	78.8	60.8	65.1
1201	2009/04/01	01:05:48	71.3	71.6	75.7	62.7	63.4
1206	2009/04/01	01:06:03	73.4	66.7	64.5	57.0	49.6
1211	2009/04/01	01:06:18	55.5	60.0	71.4	72.2	58.8
1216	2009/04/01	01:06:33	53.1	50.1	48.4	47.5	45.2
1221	2009/04/01	01:06:48	47.8	56.9	67.7	56.5	54.0
1226	2009/04/01	01:07:03	56.1	70.1	58.9	74.3	69.2
1231	2009/04/01	01:07:18	72.4	65.0	72.9	64.3	57.5
1236	2009/04/01	01:07:33	55.1	53.3	53.3	57.4	72.5
1241	2009/04/01	01:07:48	56.9	50.5	47.0	43.0	49.5
1246	2009/04/01	01:08:03	44.3	45.3	42.6	43.3	43.8
1251	2009/04/01	01:08:18	49.9	50.0	58.2	64.3	71.3
1256	2009/04/01	01:08:33	60.3	56.5	55.3	47.8	47.2
1261	2009/04/01	01:08:48	48.0	44.8	43.3	42.9	43.6
1266	2009/04/01	01:09:03	42.7	40.3	42.4	39.9	41.2
1271	2009/04/01	01:09:18	46.3	51.7	59.2	70.3	72.8
1276	2009/04/01	01:09:33	62.2	57.0	49.8	54.4	42.5
1281	2009/04/01	01:09:48	40.4	36.1	37.3	35.3	37.5
1286	2009/04/01	01:10:03	36.7	41.2	39.2	48.9	55.5
1291	2009/04/01	01:10:18	60.3	68.9	64.0	52.9	47.9
1296	2009/04/01	01:10:33	48.2	51.1	56.7	65.2	75.5
1301	2009/04/01	01:10:48	62.5	56.9	57.8	60.1	73.7
1306	2009/04/01	01:11:03	60.1	55.0	72.4	76.1	59.5
1311	2009/04/01	01:11:18	48.9	45.8	47.4	51.7	51.7
1316	2009/04/01	01:11:33	58.1	74.2	78.4	62.3	66.3
1321	2009/04/01	01:11:48	74.2	56.8	54.1	48.3	56.8
1326	2009/04/01	01:12:03	56.3	80.6	55.1	51.6	44.7
1331	2009/04/01	01:12:18	42.9	39.6	39.7	34.2	35.0
1336	2009/04/01	01:12:33	34.6	43.7	37.2	34.4	33.0
1341	2009/04/01	01:12:48	33.8	34.1	35.8	36.3	44.0
1346	2009/04/01	01:13:03	42.2	42.3	47.9	43.2	44.6
1351	2009/04/01	01:13:18	47.8	47.4	45.0	43.7	43.0
1356	2009/04/01	01:13:33	43.5	49.5	43.2	47.0	53.2
1361	2009/04/01	01:13:48	53.5	62.5	71.2	74.9	59.0
1366	2009/04/01	01:14:03	51.1	48.2	47.7	43.6	36.8
1371	2009/04/01	01:14:18	37.4	43.4	49.8	59.4	61.9
1376	2009/04/01	01:14:33	72.8	61.9	65.8	65.7	51.5
1381	2009/04/01	01:14:48	53.2	52.0	50.6	57.0	65.3
1386	2009/04/01	01:15:03	71.3	55.0	48.2	46.5	44.0
1391	2009/04/01	01:15:18	43.3	39.5	45.0	40.2	36.3
1396	2009/04/01	01:15:33	36.3	37.8	38.9	39.1	42.6
1401	2009/04/01	01:15:48	38.0	38.5	38.7	38.2	42.6
1406	2009/04/01	01:16:03	43.3	47.5	50.3	55.5	77.1
1411	2009/04/01	01:16:18	66.8	64.6	48.9	45.8	46.6

1416	2009/04/01	01:16:33	49.2	58.4	72.9	60.0	55.0
1421	2009/04/01	01:16:48	69.4	72.0	63.7	51.8	46.1
1426	2009/04/01	01:17:03	43.3	42.1	43.5	42.5	44.2
1431	2009/04/01	01:17:18	42.9	49.1	52.3	59.7	75.4
1436	2009/04/01	01:17:33	59.4	52.4	50.9	50.1	53.1
1441	2009/04/01	01:17:48	67.4	64.1	53.3	47.7	45.3
1446	2009/04/01	01:18:03	42.1	46.4	45.7	60.5	73.7
1451	2009/04/01	01:18:18	67.2	70.5	77.7	60.3	59.4
1456	2009/04/01	01:18:33	81.2	60.6	57.7	49.0	46.0
1461	2009/04/01	01:18:48	44.8	41.1	45.1	49.3	57.6
1466	2009/04/01	01:19:03	70.0	63.7	57.2	59.4	74.6
1471	2009/04/01	01:19:18	64.2	52.8	54.7	48.1	44.5
1476	2009/04/01	01:19:33	37.7	40.0	48.7	48.2	50.4
1481	2009/04/01	01:19:48	61.5	68.5	55.1	54.3	62.4
1486	2009/04/01	01:20:03	68.9	51.8	54.7	47.8	40.9
1491	2009/04/01	01:20:18	42.4	40.0	35.2	37.8	42.1
1496	2009/04/01	01:20:33	48.1	49.8	55.4	68.2	68.5
1501	2009/04/01	01:20:48	49.4	47.3	44.4	45.1	41.9
1506	2009/04/01	01:21:03	38.9	45.4	46.8	51.7	53.2
1511	2009/04/01	01:21:18	68.5	53.7	47.9	44.0	41.3
1516	2009/04/01	01:21:33	42.9	49.8	56.5	72.0	73.4
1521	2009/04/01	01:21:48	72.3	62.6	62.7	71.9	54.8
1526	2009/04/01	01:22:03	52.0	46.9	46.3	40.7	39.5
1531	2009/04/01	01:22:18	41.9	51.4	56.8	67.7	73.6
1536	2009/04/01	01:22:33	77.1	73.2	59.3	59.6	53.8
1541	2009/04/01	01:22:48	58.6	70.5	59.6	51.4	50.7
1546	2009/04/01	01:23:03	51.2	62.6	71.8	61.4	75.3
1551	2009/04/01	01:23:18	74.2	66.2	60.0	73.3	66.1
1556	2009/04/01	01:23:33	57.3	58.1	75.1	77.2	62.7
1561	2009/04/01	01:23:48	63.7	76.3	65.0	60.1	73.5
1566	2009/04/01	01:24:03	67.6	71.4	69.7	73.0	70.4
1571	2009/04/01	01:24:18	57.1	56.1	48.6	53.5	51.5
1576	2009/04/01	01:24:33	68.4	68.6	55.1	52.1	49.2
1581	2009/04/01	01:24:48	40.8	40.2	36.1	36.3	36.4
1586	2009/04/01	01:25:03	40.0	45.1	50.8	48.8	40.5
1591	2009/04/01	01:25:18	52.8	48.8	54.3	58.5	73.1
1596	2009/04/01	01:25:33	65.4	71.0	54.7	50.0	45.3
1601	2009/04/01	01:25:48	44.6	41.5	41.7	50.8	45.6
1606	2009/04/01	01:26:03	48.8	51.4	67.5	61.5	54.6
1611	2009/04/01	01:26:18	55.1	53.9	60.1	72.4	57.2
1616	2009/04/01	01:26:33	61.8	74.8	74.6	62.2	57.3
1621	2009/04/01	01:26:48	53.6	49.2	45.8	43.0	46.4
1626	2009/04/01	01:27:03	41.9	40.0	43.7	46.4	42.9
1631	2009/04/01	01:27:18	46.1	47.0	45.9	45.1	45.3
1636	2009/04/01	01:27:33	44.6	48.0	48.3	53.4	57.5
1641	2009/04/01	01:27:48	68.4	72.6	76.5	67.7	64.9
1646	2009/04/01	01:28:03	76.6	64.5	59.7	54.9	49.5
1651	2009/04/01	01:28:18	53.3	48.0	41.6	47.1	38.2
1656	2009/04/01	01:28:33	36.4	34.3	38.3	37.3	36.9
1661	2009/04/01	01:28:48	34.4	39.1	37.8	41.4	47.9
1666	2009/04/01	01:29:03	54.1	65.8	74.1	56.4	53.9
1671	2009/04/01	01:29:18	53.4	51.2	56.3	73.5	58.4
1676	2009/04/01	01:29:33	61.0	68.5	60.3	63.4	78.6
1681	2009/04/01	01:29:48	57.9	64.3	67.9	54.3	57.3
1686	2009/04/01	01:30:03	68.3	66.4	51.7	50.9	46.7
1691	2009/04/01	01:30:18	49.5	58.3	73.1	76.1	59.3
1696	2009/04/01	01:30:33	54.1	49.0	44.2	42.1	39.5
1701	2009/04/01	01:30:48	36.9	38.4	38.4	44.6	38.5
1706	2009/04/01	01:31:03	39.0	40.7	38.0	43.1	38.6
1711	2009/04/01	01:31:18	40.2	38.2	43.6	41.5	47.2
1716	2009/04/01	01:31:33	40.0	36.3	40.1	42.4	39.8
1721	2009/04/01	01:31:48	43.8	48.0	54.1	55.2	63.2
1726	2009/04/01	01:32:03	67.7	73.8	68.6	53.7	54.7
1731	2009/04/01	01:32:18	55.5	65.6	76.6	73.8	57.9
1736	2009/04/01	01:32:33	55.6	55.1	53.3	68.5	65.0
1741	2009/04/01	01:32:48	51.6	52.0	57.6	62.3	75.3
1746	2009/04/01	01:33:03	68.4	73.5	69.2	62.9	75.3
1751	2009/04/01	01:33:18	60.9	72.6	70.1	54.4	50.7
1756	2009/04/01	01:33:33	52.4	53.8	56.1	75.9	70.5
1761	2009/04/01	01:33:48	58.4	71.5	70.5	53.8	54.3
1766	2009/04/01	01:34:03	44.0	43.9	46.4	56.0	71.0
1771	2009/04/01	01:34:18	65.4	50.2	49.5	43.4	43.5
1776	2009/04/01	01:34:33	40.7	35.5	35.4	34.2	34.9
1781	2009/04/01	01:34:48	44.8	44.5	49.7	38.5	36.9
1786	2009/04/01	01:35:03	34.9	37.8	43.6	44.0	47.2
1791	2009/04/01	01:35:18	51.5	68.3	69.6	66.2	78.0
1796	2009/04/01	01:35:33	61.5	67.6	65.4	56.1	53.3
1801	2009/04/01	01:35:48	54.0	66.7	66.0	54.1	60.5
1806	2009/04/01	01:36:03	69.4	54.3	51.5	49.4	59.2
1811	2009/04/01	01:36:18	60.1	73.3	72.0	77.4	64.7
1816	2009/04/01	01:36:33	66.8	59.1	49.2	49.6	44.4
1821	2009/04/01	01:36:48	38.3	37.4	36.5	37.0	36.7
1826	2009/04/01	01:37:03	37.6	57.9	41.0	43.2	48.1
1831	2009/04/01	01:37:18	51.9	61.2	68.3	72.0	63.0
1836	2009/04/01	01:37:33	57.6	57.2	48.9	53.0	62.6
1841	2009/04/01	01:37:48	76.0	59.9	58.1	47.5	43.3
1846	2009/04/01	01:38:03	40.7	39.8	39.8	47.3	44.1
1851	2009/04/01	01:38:18	35.7	42.1	39.4	41.1	43.4
1856	2009/04/01	01:38:33	43.2	38.3	44.9	43.9	34.1
1861	2009/04/01	01:38:48	45.1	42.7	43.9	40.4	44.2
1866	2009/04/01	01:39:03	49.1	52.3	59.5	79.0	70.9
1871	2009/04/01	01:39:18	63.4	60.5	55.5	53.0	49.1
1876	2009/04/01	01:39:33	46.8	50.8	68.1	61.7	50.9
1881	2009/04/01	01:39:48	50.0	64.5	64.4	52.4	55.0
1886	2009/04/01	01:40:03	65.9	66.0	52.0	49.9	44.6
1891	2009/04/01	01:40:18	51.8	53.4	54.2	66.7	70.7
1896	2009/04/01	01:40:33	56.9	50.6	45.7	44.6	40.9
1901	2009/04/01	01:40:48	37.2	35.9	34.3	37.2	35.1
1906	2009/04/01	01:41:03	39.7	37.7	39.0	48.8	51.7

1911	2009/04/01	01:41:18	57.0	73.1	70.4	55.5	65.5
1916	2009/04/01	01:41:33	66.8	52.3	47.4	43.8	46.8
1921	2009/04/01	01:41:48	49.4	45.0	53.3	63.6	65.8
1926	2009/04/01	01:42:03	53.1	57.3	66.7	78.9	63.9
1931	2009/04/01	01:42:18	61.5	74.0	67.9	70.5	56.3
1936	2009/04/01	01:42:33	57.2	65.0	59.3	48.6	43.3
1941	2009/04/01	01:42:48	38.1	35.6	42.8	34.3	34.0
1946	2009/04/01	01:43:03	35.7	35.9	46.3	52.7	53.0
1951	2009/04/01	01:43:18	58.9	72.5	73.2	70.4	74.5
1956	2009/04/01	01:43:33	62.9	54.9	53.7	45.9	40.9
1961	2009/04/01	01:43:48	43.2	47.1	50.9	45.8	59.2
1966	2009/04/01	01:44:03	53.6	71.8	60.0	53.5	55.1
1971	2009/04/01	01:44:18	53.1	62.8	51.7	71.1	69.7
1976	2009/04/01	01:44:33	67.3	57.1	54.7	56.2	72.7
1981	2009/04/01	01:44:48	58.9	50.0	46.3	43.0	42.9
1986	2009/04/01	01:45:03	45.5	56.5	54.9	70.7	62.4
1991	2009/04/01	01:45:18	73.0	70.9	57.2	53.3	46.9
1996	2009/04/01	01:45:33	44.5	44.7	38.4	39.0	40.6
2001	2009/04/01	01:45:48	51.0	51.2	68.7	63.1	62.2
2006	2009/04/01	01:46:03	75.3	56.0	54.1	49.5	44.7
2011	2009/04/01	01:46:18	44.4	54.9	59.2	68.4	63.0
2016	2009/04/01	01:46:33	49.8	45.7	48.1	52.6	50.2
2021	2009/04/01	01:46:48	56.8	74.5	59.5	46.4	48.1
2026	2009/04/01	01:47:03	54.8	67.1	75.9	57.9	59.7
2031	2009/04/01	01:47:18	45.8	39.7	43.2	45.6	40.1
2036	2009/04/01	01:47:33	42.5	41.6	44.9	43.2	35.6
2041	2009/04/01	01:47:48	46.6	36.9	40.8	47.4	52.6
2046	2009/04/01	01:48:03	58.4	72.5	63.6	69.7	52.9
2051	2009/04/01	01:48:18	49.9	48.0	46.7	40.1	39.3
2056	2009/04/01	01:48:33	39.5	39.4	40.3	38.5	40.8
2061	2009/04/01	01:48:48	36.0	36.0	40.2	38.5	40.2
2066	2009/04/01	01:49:03	45.5	51.4	57.1	69.5	62.7
2071	2009/04/01	01:49:18	70.6	53.2	52.2	63.1	71.7
2076	2009/04/01	01:49:33	73.9	57.6	60.9	69.1	56.4
2081	2009/04/01	01:49:48	53.6	53.9	45.4	40.9	40.9
2086	2009/04/01	01:50:03	44.3	41.1	44.1	45.5	46.8
2091	2009/04/01	01:50:18	51.6	66.4	64.6	51.8	48.7
2096	2009/04/01	01:50:33	52.1	63.4	60.6	48.8	45.8
2101	2009/04/01	01:50:48	44.3	46.8	51.0	51.6	57.6
2106	2009/04/01	01:51:03	70.6	50.3	51.2	56.3	69.4
2111	2009/04/01	01:51:18	75.7	59.1	75.3	72.6	55.3
2116	2009/04/01	01:51:33	55.9	55.4	59.0	70.7	53.3
2121	2009/04/01	01:51:48	46.8	48.1	52.3	54.4	64.4
2126	2009/04/01	01:52:03	63.7	48.9	44.4	46.9	49.0
2131	2009/04/01	01:52:18	54.6	66.8	65.8	51.5	47.4
2136	2009/04/01	01:52:33	55.9	60.2	73.2	66.3	73.5
2141	2009/04/01	01:52:48	57.6	55.5	73.4	57.6	47.1
2146	2009/04/01	01:53:03	44.8	44.2	51.0	53.2	55.3
2151	2009/04/01	01:53:18	67.7	65.4	52.3	49.8	53.6
2156	2009/04/01	01:53:33	65.0	67.6	80.7	64.5	71.8
2161	2009/04/01	01:53:48	52.9	48.0	44.9	48.5	52.0
2166	2009/04/01	01:54:03	68.2	53.1	45.0	51.1	40.5
2171	2009/04/01	01:54:18	47.4	36.4	38.3	42.6	53.0
2176	2009/04/01	01:54:33	59.5	75.9	61.7	53.7	55.2
2181	2009/04/01	01:54:48	55.6	60.4	74.0	54.3	56.2
2186	2009/04/01	01:55:03	73.8	51.0	45.7	41.2	43.3
2191	2009/04/01	01:55:18	52.9	54.8	63.7	80.2	68.8
2196	2009/04/01	01:55:33	59.9	69.5	63.5	72.9	65.7
2201	2009/04/01	01:55:48	74.6	59.9	55.8	52.8	48.8
2206	2009/04/01	01:56:03	52.9	55.7	63.0	76.5	65.0
2211	2009/04/01	01:56:18	56.9	54.2	51.5	48.8	50.7
2216	2009/04/01	01:56:33	51.3	57.5	64.3	79.0	61.2
2221	2009/04/01	01:56:48	56.4	59.2	65.4	76.1	58.8
2226	2009/04/01	01:57:03	56.5	49.6	44.3	43.8	45.4
2231	2009/04/01	01:57:18	39.3	44.1	46.0	51.7	65.4
2236	2009/04/01	01:57:33	76.8	77.4	58.0	61.0	57.9
2241	2009/04/01	01:57:48	56.4	59.2	70.7	52.1	51.0
2246	2009/04/01	01:58:03	54.2	64.0	77.0	67.3	77.9
2251	2009/04/01	01:58:18	70.3	71.0	62.2	60.3	55.5
2256	2009/04/01	01:58:33	57.1	66.9	74.5	62.7	70.8
2261	2009/04/01	01:58:48	64.8	51.3	48.9	48.5	53.1
2266	2009/04/01	01:59:03	52.7	59.2	74.8	63.4	69.8
2271	2009/04/01	01:59:18	64.0	72.2	56.8	59.8	72.2
2276	2009/04/01	01:59:33	68.1	72.5	68.2	65.7	55.1
2281	2009/04/01	01:59:48	59.6	73.5	75.3	58.4	59.4
2286	2009/04/01	02:00:03	72.5	64.9	54.1	53.4	50.2
2291	2009/04/01	02:00:18	46.5	48.7	47.3	56.0	50.9
2296	2009/04/01	02:00:33	51.8	51.9	51.2	52.3	52.6
2301	2009/04/01	02:00:48	58.2	71.6	55.4	52.1	55.2
2306	2009/04/01	02:01:03	51.2	51.2	57.3	55.1	58.1
2311	2009/04/01	02:01:18	63.9	81.8	70.7	72.5	59.3
2316	2009/04/01	02:01:33	55.1	53.3	52.8	53.9	55.1
2321	2009/04/01	02:01:48	55.8	56.2	70.8	75.0	73.0
2326	2009/04/01	02:02:03	74.5	73.8	61.4	58.5	54.6
2331	2009/04/01	02:02:18	50.6	46.1	46.5	50.2	58.1
2336	2009/04/01	02:02:33	74.3	69.2	57.7	66.1	69.8
2341	2009/04/01	02:02:48	65.0	78.2	59.8	48.3	45.3
2346	2009/04/01	02:03:03	56.6	64.8	70.5	54.6	55.2
2351	2009/04/01	02:03:18	52.6	60.3	72.4	56.8	60.7
2356	2009/04/01	02:03:33	74.8	64.5	57.2	51.1	54.8
2361	2009/04/01	02:03:48	56.7	62.1	63.6	76.4	66.8
2366	2009/04/01	02:04:03	55.2	52.6	48.9	46.9	44.4
2371	2009/04/01	02:04:18	43.4	35.5	36.5	44.9	39.4
2376	2009/04/01	02:04:33	45.3	42.2	44.6	49.3	48.6
2381	2009/04/01	02:04:48	58.4	76.3	54.2	47.4	47.7
2386	2009/04/01	02:05:03	47.0	50.3	64.1	73.0	61.5
2391	2009/04/01	02:05:18	59.8	66.6	75.6	76.3	58.8
2396	2009/04/01	02:05:33	56.7	46.8	51.1	54.1	55.6
2401	2009/04/01	02:05:48	67.4	68.1	74.1	57.0	56.7

2406	2009/04/01	02:06:03	47.8	44.4	40.4	41.5	47.0
2411	2009/04/01	02:06:18	38.7	41.7	41.3	39.7	35.9
2416	2009/04/01	02:06:33	35.4	35.7	39.0	37.5	39.3
2421	2009/04/01	02:06:48	45.8	52.5	59.4	71.0	60.2
2426	2009/04/01	02:07:03	51.0	49.0	51.5	57.0	74.8
2431	2009/04/01	02:07:18	55.2	59.3	77.4	59.5	51.4
2436	2009/04/01	02:07:33	49.0	48.4	48.9	57.2	55.2
2441	2009/04/01	02:07:48	62.0	77.3	57.9	53.0	51.6
2446	2009/04/01	02:08:03	52.1	56.5	66.9	66.7	67.9
2451	2009/04/01	02:08:18	69.3	59.0	59.6	69.8	54.7
2456	2009/04/01	02:08:33	54.7	50.1	46.6	45.1	46.1
2461	2009/04/01	02:08:48	49.4	56.8	68.8	71.2	71.2
2466	2009/04/01	02:09:03	69.5	74.6	59.6	66.4	70.3
2471	2009/04/01	02:09:18	52.7	56.8	55.8	66.1	79.4
2476	2009/04/01	02:09:33	67.4	60.4	63.9	73.9	58.0
2481	2009/04/01	02:09:48	53.4	50.8	47.5	49.3	48.8
2486	2009/04/01	02:10:03	56.7	70.0	53.5	53.3	61.7
2491	2009/04/01	02:10:18	71.5	54.9	54.6	57.1	71.4
2496	2009/04/01	02:10:33	74.4	70.6	59.2	66.8	66.9
2501	2009/04/01	02:10:48	53.8	56.0	63.9	70.4	76.1
2506	2009/04/01	02:11:03	71.7	64.9	57.2	69.8	77.9
2511	2009/04/01	02:11:18	71.9	62.1	56.9	56.3	69.8
2516	2009/04/01	02:11:33	64.1	52.5	53.5	50.4	45.6
2521	2009/04/01	02:11:48	48.7	58.8	55.7	63.0	67.8
2526	2009/04/01	02:12:03	71.9	72.3	65.1	67.6	50.9
2531	2009/04/01	02:12:18	49.4	50.1	51.8	49.0	58.6
2536	2009/04/01	02:12:33	71.0	69.8	58.7	54.8	51.7
2541	2009/04/01	02:12:48	47.0	46.5	47.3	54.7	69.8
2546	2009/04/01	02:13:03	71.5	62.3	54.4	54.5	70.4
2551	2009/04/01	02:13:18	59.7	51.9	51.1	46.2	48.2
2556	2009/04/01	02:13:33	57.3	68.2	77.6	74.0	59.9
2561	2009/04/01	02:13:48	56.1	46.5	48.1	50.6	51.4
2566	2009/04/01	02:14:03	57.3	65.4	51.0	43.8	45.3
2571	2009/04/01	02:14:18	43.6	41.7	49.7	48.3	58.0
2576	2009/04/01	02:14:33	69.9	54.0	51.7	45.2	42.7
2581	2009/04/01	02:14:48	41.5	38.8	36.0	36.1	38.9
2586	2009/04/01	02:15:03	37.0	39.0	39.9	42.2	36.9
2591	2009/04/01	02:15:18	37.4	37.7	38.2	35.9	42.0
2596	2009/04/01	02:15:33	40.3	44.0	46.0	50.5	50.0
2601	2009/04/01	02:15:48	52.5	52.9	63.0	66.2	53.0
2606	2009/04/01	02:16:03	47.3	53.7	51.8	59.8	75.9
2611	2009/04/01	02:16:18	69.1	61.8	75.6	69.7	72.1
2616	2009/04/01	02:16:33	67.1	53.4	53.4	49.7	44.6
2621	2009/04/01	02:16:48	45.7	50.8	56.9	61.2	75.6
2626	2009/04/01	02:17:03	71.9	68.3	71.5	64.7	51.4
2631	2009/04/01	02:17:18	47.9	45.4	45.5	47.9	50.9
2636	2009/04/01	02:17:33	56.4	68.4	53.6	45.8	49.1
2641	2009/04/01	02:17:48	52.8	72.2	73.6	63.0	56.4
2646	2009/04/01	02:18:03	54.5	50.9	57.0	73.3	72.5
2651	2009/04/01	02:18:18	56.9	54.1	51.4	57.7	70.7
2656	2009/04/01	02:18:33	51.9	47.1	43.3	43.8	41.3
2661	2009/04/01	02:18:48	50.7	44.9	41.1	40.5	48.8
2666	2009/04/01	02:19:03	48.4	45.0	43.3	34.9	43.5
2671	2009/04/01	02:19:18	40.5	35.8	37.9	41.7	47.4
2676	2009/04/01	02:19:33	45.0	54.3	59.9	69.3	59.5
2681	2009/04/01	02:19:48	53.2	52.5	39.4	42.0	41.8
2686	2009/04/01	02:20:03	46.3	44.3	39.8	50.2	44.7
2691	2009/04/01	02:20:18	49.2	49.2	53.0	63.1	64.0
2696	2009/04/01	02:20:33	50.8	45.2	39.0	40.1	40.9
2701	2009/04/01	02:20:48	49.2	52.7	71.4	63.7	65.4
2706	2009/04/01	02:21:03	67.8	56.7	46.5	53.9	54.4
2711	2009/04/01	02:21:18	50.1	41.9	54.8	53.3	54.5
2716	2009/04/01	02:21:33	52.8	49.5	46.7	54.6	53.4
2721	2009/04/01	02:21:48	50.8	55.5	51.4	51.0	49.0
2726	2009/04/01	02:22:03	46.3	61.6	55.2	63.9	67.9
2731	2009/04/01	02:22:18	51.3	57.0	61.6	70.5	57.6
2736	2009/04/01	02:22:33	54.7	51.3	48.1	47.8	51.7
2741	2009/04/01	02:22:48	50.5	48.9	53.5	55.9	56.2
2746	2009/04/01	02:23:03	69.3	63.7	56.4	60.0	55.3
2751	2009/04/01	02:23:18	56.5	66.9	61.8	51.6	48.8
2756	2009/04/01	02:23:33	50.3	54.2	58.1	69.6	67.8
2761	2009/04/01	02:23:48	63.6	56.7	66.7	74.9	55.9
2766	2009/04/01	02:24:03	53.7	56.0	69.3	59.2	53.7
2771	2009/04/01	02:24:18	64.0	67.9	52.7	53.2	49.8
2776	2009/04/01	02:24:33	48.1	51.4	46.4	54.1	54.4
2781	2009/04/01	02:24:48	56.4	56.4	57.3	58.2	54.1
2786	2009/04/01	02:25:03	52.1	47.9	46.7	51.6	55.5
2791	2009/04/01	02:25:18	62.0	75.9	70.3	57.0	54.2
2796	2009/04/01	02:25:33	50.9	46.8	43.4	42.0	40.1
2801	2009/04/01	02:25:48	37.7	45.0	46.0	53.2	55.5
2806	2009/04/01	02:26:03	69.9	57.0	58.3	51.4	47.5
2811	2009/04/01	02:26:18	40.5	48.5	62.4	68.0	52.0
2816	2009/04/01	02:26:33	46.2	52.9	50.7	67.7	67.2
2821	2009/04/01	02:26:48	52.2	52.8	61.0	69.2	70.0
2826	2009/04/01	02:27:03	55.8	61.7	73.9	55.6	56.3
2831	2009/04/01	02:27:18	44.3	43.3	41.4	39.8	62.2
2836	2009/04/01	02:27:33	50.0	46.4	56.2	74.4	54.9
2841	2009/04/01	02:27:48	50.5	47.2	43.5	45.6	47.5
2846	2009/04/01	02:28:03	50.2	47.1	48.6	56.3	73.3
2851	2009/04/01	02:28:18	62.8	62.3	67.8	50.7	50.3
2856	2009/04/01	02:28:33	59.7	79.9	58.9	57.5	64.6
2861	2009/04/01	02:28:48	69.1	52.9	60.3	73.4	71.7
2866	2009/04/01	02:29:03	60.3	66.3	71.8	70.0	77.5
2871	2009/04/01	02:29:18	59.0	62.7	68.8	68.8	72.2
2876	2009/04/01	02:29:33	55.4	48.7	45.9	43.8	39.4
2881	2009/04/01	02:29:48	37.2	36.2	35.5	36.3	38.8
2886	2009/04/01	02:30:03	44.5	54.2	70.5	61.2	52.0
2891	2009/04/01	02:30:18	54.6	57.1	65.6	75.6	74.9
2896	2009/04/01	02:30:33	59.1	53.7	52.3	53.0	57.9

2901	2009/04/01	02:30:48	74.3	71.6	69.3	54.9	54.7
2906	2009/04/01	02:31:03	47.0	44.3	40.7	39.6	35.8
2911	2009/04/01	02:31:18	37.7	41.5	36.5	43.9	41.5
2916	2009/04/01	02:31:33	48.4	58.8	73.5	75.5	76.0
2921	2009/04/01	02:31:48	57.4	55.9	46.2	47.5	47.5
2926	2009/04/01	02:32:03	55.2	65.0	76.2	65.7	65.5
2931	2009/04/01	02:32:18	56.6	55.9	50.5	53.9	58.0
2936	2009/04/01	02:32:33	71.6	65.2	71.5	55.7	55.5
2941	2009/04/01	02:32:48	46.3	42.6	39.1	39.6	40.9
2946	2009/04/01	02:33:03	48.9	49.1	55.8	82.1	58.6
2951	2009/04/01	02:33:18	52.7	59.5	50.3	49.6	49.4
2956	2009/04/01	02:33:33	57.7	70.9	52.4	63.2	75.1
2961	2009/04/01	02:33:48	55.2	55.3	41.6	42.4	42.3
2966	2009/04/01	02:34:03	38.7	40.0	39.0	41.9	40.5
2971	2009/04/01	02:34:18	40.7	37.9	41.1	41.0	43.0
2976	2009/04/01	02:34:33	51.6	58.3	66.7	64.7	52.2
2981	2009/04/01	02:34:48	49.0	42.0	39.9	36.6	37.5
2986	2009/04/01	02:35:03	39.8	35.7	35.4	38.2	37.8
2991	2009/04/01	02:35:18	40.8	46.9	57.6	72.6	76.9
2996	2009/04/01	02:35:33	59.2	56.0	47.2	42.2	38.9
3001	2009/04/01	02:35:48	36.0	37.7	39.6	44.3	53.0
3006	2009/04/01	02:36:03	70.6	73.6	63.7	57.0	52.8
3011	2009/04/01	02:36:18	54.9	72.2	55.0	47.6	49.8
3016	2009/04/01	02:36:33	50.5	50.6	56.4	71.2	72.0
3021	2009/04/01	02:36:48	76.8	67.2	67.0	50.8	45.2
3026	2009/04/01	02:37:03	40.9	42.8	38.9	41.7	50.0
3031	2009/04/01	02:37:18	58.0	74.5	72.3	60.5	57.0
3036	2009/04/01	02:37:33	54.8	75.0	56.6	48.4	41.7
3041	2009/04/01	02:37:48	39.8	42.0	45.8	46.4	50.8
3046	2009/04/01	02:38:03	58.8	71.7	78.9	71.9	75.7
3051	2009/04/01	02:38:18	65.1	56.1	55.9	45.7	45.9
3056	2009/04/01	02:38:33	41.8	44.3	46.5	50.9	60.2
3061	2009/04/01	02:38:48	70.0	59.0	69.3	50.1	46.4
3066	2009/04/01	02:39:03	41.7	40.1	37.2	37.1	36.6
3071	2009/04/01	02:39:18	36.8	38.2	42.5	53.4	57.0
3076	2009/04/01	02:39:33	71.9	77.1	70.8	72.8	66.1
3081	2009/04/01	02:39:48	58.0	54.1	55.5	52.4	59.4
3086	2009/04/01	02:40:03	73.4	54.9	47.6	44.9	43.1
3091	2009/04/01	02:40:18	47.9	39.7	38.7	38.4	38.8
3096	2009/04/01	02:40:33	36.4	37.7	35.3	39.5	39.2
3101	2009/04/01	02:40:48	41.4	36.6	37.6	40.0	44.6
3106	2009/04/01	02:41:03	52.2	71.9	62.2	66.2	76.9
3111	2009/04/01	02:41:18	57.7	60.3	75.0	72.0	64.5
3116	2009/04/01	02:41:33	56.5	49.8	46.1	48.0	54.8
3121	2009/04/01	02:41:48	64.2	64.0	67.7	77.1	61.7
3126	2009/04/01	02:42:03	54.5	52.8	46.4	52.8	51.1
3131	2009/04/01	02:42:18	59.0	75.6	57.7	58.5	74.6
3136	2009/04/01	02:42:33	61.4	72.7	54.8	51.1	45.6
3141	2009/04/01	02:42:48	46.0	40.2	47.3	47.8	56.8
3146	2009/04/01	02:43:03	67.5	67.3	50.3	47.4	46.6
3151	2009/04/01	02:43:18	49.5	53.0	56.4	71.5	53.1
3156	2009/04/01	02:43:33	50.5	45.4	46.7	49.6	54.2
3161	2009/04/01	02:43:48	62.3	67.3	72.4	74.6	66.2
3166	2009/04/01	02:44:03	59.5	54.7	48.6	49.1	49.7
3171	2009/04/01	02:44:18	52.6	60.1	75.5	72.4	77.6
3176	2009/04/01	02:44:33	72.3	63.2	54.8	53.1	46.6
3181	2009/04/01	02:44:48	48.7	60.9	73.1	52.3	49.0
3186	2009/04/01	02:45:03	65.7	48.9	55.4	60.5	73.5
3191	2009/04/01	02:45:18	67.3	79.5	57.1	57.0	48.0
3196	2009/04/01	02:45:33	50.8	51.9	69.0	73.2	55.6
3201	2009/04/01	02:45:48	51.3	48.1	49.7	43.3	42.4
3206	2009/04/01	02:46:03	47.3	47.5	51.1	59.8	62.8
3211	2009/04/01	02:46:18	55.6	75.8	66.1	78.1	73.4
3216	2009/04/01	02:46:33	74.5	73.6	68.2	73.9	70.6
3221	2009/04/01	02:46:48	55.9	51.4	49.5	50.6	61.7
3226	2009/04/01	02:47:03	73.3	69.5	72.4	73.6	57.3
3231	2009/04/01	02:47:18	55.5	49.8	48.8	47.3	47.6
3236	2009/04/01	02:47:33	47.1	46.7	50.9	58.3	71.3
3241	2009/04/01	02:47:48	70.0	69.4	65.2	55.3	70.1
3246	2009/04/01	02:48:03	55.8	49.9	53.6	59.5	75.9
3251	2009/04/01	02:48:18	67.2	57.4	55.9	50.2	52.4
3256	2009/04/01	02:48:33	57.4	71.5	74.9	61.5	51.6
3261	2009/04/01	02:48:48	49.0	49.7	53.6	72.1	63.8
3266	2009/04/01	02:49:03	52.6	52.7	48.6	47.7	48.4
3271	2009/04/01	02:49:18	46.7	45.5	47.4	47.7	53.2
3276	2009/04/01	02:49:33	52.1	67.9	58.1	51.7	50.4
3281	2009/04/01	02:49:48	47.8	48.9	47.3	47.5	46.5
3286	2009/04/01	02:50:03	46.5	46.3	47.0	49.2	57.6
3291	2009/04/01	02:50:18	71.5	64.1	51.9	49.0	44.4
3296	2009/04/01	02:50:33	41.7	44.3	48.9	60.1	74.3
3301	2009/04/01	02:50:48	77.6	73.5	63.7	64.2	65.1
3306	2009/04/01	02:51:03	52.0	48.3	43.1	44.5	43.8
3311	2009/04/01	02:51:18	43.5	43.3	50.2	59.8	69.7
3316	2009/04/01	02:51:33	60.3	73.3	65.0	76.4	67.1
3321	2009/04/01	02:51:48	72.0	56.0	53.0	46.2	43.4
3326	2009/04/01	02:52:03	42.0	39.7	42.9	42.0	42.4
3331	2009/04/01	02:52:18	42.5	48.7	54.9	56.6	66.4
3336	2009/04/01	02:52:33	78.0	57.2	54.3	60.5	73.1
3341	2009/04/01	02:52:48	70.9	59.3	54.8	52.1	43.9
3346	2009/04/01	02:53:03	45.1	42.2	42.1	40.8	42.0
3351	2009/04/01	02:53:18	40.7	41.0	40.9	42.3	42.0
3356	2009/04/01	02:53:33	49.1	58.0	68.6	75.5	71.2
3361	2009/04/01	02:53:48	59.1	60.6	77.7	78.0	70.7
3366	2009/04/01	02:54:03	62.2	63.4	60.9	60.1	73.0
3371	2009/04/01	02:54:18	68.0	58.1	61.7	71.4	61.8
3376	2009/04/01	02:54:33	53.9	57.2	70.8	59.2	55.4
3381	2009/04/01	02:54:48	64.3	74.7	57.2	61.0	70.8
3386	2009/04/01	02:55:03	58.9	51.6	48.6	42.2	40.6
3391	2009/04/01	02:55:18	41.9	39.5	39.6	46.0	47.9

3396	2009/04/01	02:55:33	51.7	50.8	55.5	70.0	72.2
3401	2009/04/01	02:55:48	60.4	78.7	70.1	73.5	74.0
3406	2009/04/01	02:56:03	72.7	76.6	67.1	56.8	54.9
3411	2009/04/01	02:56:18	63.5	75.0	72.9	75.8	65.1
3416	2009/04/01	02:56:33	61.0	58.1	51.7	60.3	70.7
3421	2009/04/01	02:56:48	51.5	53.2	65.6	61.8	53.0
3426	2009/04/01	02:57:03	45.7	46.0	46.1	48.5	54.6
3431	2009/04/01	02:57:18	65.3	75.4	56.8	53.4	51.3
3436	2009/04/01	02:57:33	52.8	68.9	69.4	56.6	58.2
3441	2009/04/01	02:57:48	69.7	77.8	63.4	60.8	53.5
3446	2009/04/01	02:58:03	57.1	66.6	67.3	72.7	55.7
3451	2009/04/01	02:58:18	55.5	45.8	51.4	52.4	59.3
3456	2009/04/01	02:58:33	70.2	53.4	57.2	61.8	44.5
3461	2009/04/01	02:58:48	47.9	53.2	66.2	61.7	54.9
3466	2009/04/01	02:59:03	45.2	41.6	48.3	51.2	44.9
3471	2009/04/01	02:59:18	50.6	71.1	76.3	66.9	64.3
3476	2009/04/01	02:59:33	55.8	46.5	45.6	42.5	45.0
3481	2009/04/01	02:59:48	50.9	52.8	62.7	67.8	50.9
3486	2009/04/01	03:00:03	55.3	69.1	53.0	52.6	58.3
3491	2009/04/01	03:00:18	73.1	70.9	56.0	53.2	49.2
3496	2009/04/01	03:00:33	45.0	42.8	42.8	38.2	48.2
3501	2009/04/01	03:00:48	56.4	45.2	50.3	45.2	54.3
3506	2009/04/01	03:01:03	49.6	41.8	44.0	48.8	54.9
3511	2009/04/01	03:01:18	76.3	57.3	53.2	53.4	56.6
3516	2009/04/01	03:01:33	65.6	75.1	76.0	64.1	55.9
3521	2009/04/01	03:01:48	54.1	46.8	42.7	42.0	42.1
3526	2009/04/01	03:02:03	41.9	40.9	43.5	44.3	41.1
3531	2009/04/01	03:02:18	45.9	66.2	52.8	65.4	67.8
3536	2009/04/01	03:02:33	64.8	71.9	54.0	50.1	47.3
3541	2009/04/01	03:02:48	46.8	49.6	56.4	73.1	66.1
3546	2009/04/01	03:03:03	56.0	56.2	45.8	43.1	51.2
3551	2009/04/01	03:03:18	54.2	69.5	62.5	71.1	72.9
3556	2009/04/01	03:03:33	74.0	58.6	56.4	49.5	49.9
3561	2009/04/01	03:03:48	52.4	53.2	64.5	68.6	67.9
3566	2009/04/01	03:04:03	50.4	49.5	51.6	58.3	71.6
3571	2009/04/01	03:04:18	69.7	57.8	71.1	62.1	63.0
3576	2009/04/01	03:04:33	79.3	75.6	70.8	54.0	49.4
3581	2009/04/01	03:04:48	46.9	50.6	58.5	79.3	66.0
3586	2009/04/01	03:05:03	62.0	50.6	49.3	45.1	55.1
3591	2009/04/01	03:05:18	55.9	47.2	43.7	45.2	42.9
3596	2009/04/01	03:05:33	44.2	43.8	42.0	41.9	41.5
3601	2009/04/01	03:05:48	41.3	41.8	42.1	44.6	42.2
3606	2009/04/01	03:06:03	46.0	45.3	46.0	43.8	41.9
3611	2009/04/01	03:06:18	41.9	42.1	42.0	43.0	47.6
3616	2009/04/01	03:06:33	47.1	51.6	54.1	77.0	56.7
3621	2009/04/01	03:06:48	49.1	47.8	49.7	46.9	48.5
3626	2009/04/01	03:07:03	50.9	56.9	75.2	67.4	59.0
3631	2009/04/01	03:07:18	63.3	75.3	70.5	56.1	54.8
3636	2009/04/01	03:07:33	75.0	64.0	54.9	47.8	48.0
3641	2009/04/01	03:07:48	40.2	43.6	43.5	46.3	50.3
3646	2009/04/01	03:08:03	64.4	68.5	51.1	45.9	49.2
3651	2009/04/01	03:08:18	56.1	55.5	61.4	77.8	56.7
3656	2009/04/01	03:08:33	54.5	68.0	63.4	58.5	72.7
3661	2009/04/01	03:08:48	64.6	54.3	51.0	50.5	53.3
3666	2009/04/01	03:09:03	56.3	57.4	69.3	60.7	48.2
3671	2009/04/01	03:09:18	49.7	50.3	54.2	75.9	56.8
3676	2009/04/01	03:09:33	58.2	69.7	51.6	50.0	50.8
3681	2009/04/01	03:09:48	57.9	72.8	63.7	75.6	69.3
3686	2009/04/01	03:10:03	63.3	51.9	55.9	60.0	73.7
3691	2009/04/01	03:10:18	65.5	76.1	59.2	62.1	67.4
3696	2009/04/01	03:10:33	64.2	69.7	65.6	53.2	62.7
3701	2009/04/01	03:10:48	59.2	63.4	77.9	76.4	66.5
3706	2009/04/01	03:11:03	59.4	56.2	57.0	57.3	65.9
3711	2009/04/01	03:11:18	79.9	59.2	52.1	44.3	44.7
3716	2009/04/01	03:11:33	45.0	44.8	48.8	52.1	75.0
3721	2009/04/01	03:11:48	53.0	49.6	63.1	69.9	51.8
3726	2009/04/01	03:12:03	48.7	48.2	43.0	45.9	39.7
3731	2009/04/01	03:12:18	42.9	42.6	43.4	45.8	48.9
3736	2009/04/01	03:12:33	48.1	58.5	64.8	53.3	67.9
3741	2009/04/01	03:12:48	60.5	50.4	48.9	44.0	44.7
3746	2009/04/01	03:13:03	48.1	45.8	57.3	56.7	67.5
3751	2009/04/01	03:13:18	63.1	71.6	60.8	60.2	68.2
3756	2009/04/01	03:13:33	48.3	44.2	41.2	39.5	52.6
3761	2009/04/01	03:13:48	38.7	40.1	44.0	50.1	38.3
3766	2009/04/01	03:14:03	36.5	36.7	44.5	37.8	36.1
3771	2009/04/01	03:14:18	37.1	36.1	53.1	37.1	37.7
3776	2009/04/01	03:14:33	36.1	44.1	36.8	36.9	38.7
3781	2009/04/01	03:14:48	45.5	36.8	38.5	56.8	40.3
3786	2009/04/01	03:15:03	52.0	42.3	47.2	53.3	65.4
3791	2009/04/01	03:15:18	73.2	72.7	56.4	50.3	48.0
3796	2009/04/01	03:15:33	46.7	44.7	44.1	44.3	45.5
3801	2009/04/01	03:15:48	44.8	55.5	56.0	70.7	55.7
3806	2009/04/01	03:16:03	71.4	73.2	59.8	70.5	53.1
3811	2009/04/01	03:16:18	48.2	44.4	41.4	41.4	40.6
3816	2009/04/01	03:16:33	41.0	45.0	49.6	55.3	67.8
3821	2009/04/01	03:16:48	68.5	49.8	50.4	61.2	75.2
3826	2009/04/01	03:17:03	55.3	71.4	63.5	54.3	52.0
3831	2009/04/01	03:17:18	50.1	42.5	49.6	48.0	53.1
3836	2009/04/01	03:17:33	67.2	78.7	64.1	76.0	65.0
3841	2009/04/01	03:17:48	72.3	56.0	55.4	71.3	78.5
3846	2009/04/01	03:18:03	62.7	58.1	65.9	76.3	71.5
3851	2009/04/01	03:18:18	55.7	53.1	48.1	44.3	41.7
3856	2009/04/01	03:18:33	39.6	41.2	41.5	42.8	47.3
3861	2009/04/01	03:18:48	53.0	53.4	78.3	61.0	49.3
3866	2009/04/01	03:19:03	56.9	71.9	62.1	55.2	51.5
3871	2009/04/01	03:19:18	47.2	46.3	44.7	52.5	52.6
3876	2009/04/01	03:19:33	59.2	74.9	60.3	62.4	58.0
3881	2009/04/01	03:19:48	54.5	50.8	57.3	78.9	61.3
3886	2009/04/01	03:20:03	50.7	45.1	43.2	42.7	41.6

3891	2009/04/01	03:20:18	41.5	38.9	38.6	39.4	37.3
3896	2009/04/01	03:20:33	37.8	36.4	42.2	37.1	38.2
3901	2009/04/01	03:20:48	36.8	39.1	42.7	48.3	56.1
3906	2009/04/01	03:21:03	70.2	58.9	51.7	54.2	45.5
3911	2009/04/01	03:21:18	44.6	52.2	63.8	72.6	53.6
3916	2009/04/01	03:21:33	51.4	51.2	50.3	63.3	75.7
3921	2009/04/01	03:21:48	69.6	54.4	56.1	74.9	58.8
3926	2009/04/01	03:22:03	61.3	74.3	56.3	49.1	48.5
3931	2009/04/01	03:22:18	50.9	51.7	66.9	61.2	47.4
3936	2009/04/01	03:22:33	46.3	46.1	48.6	60.4	71.4
3941	2009/04/01	03:22:48	50.1	48.0	49.8	49.4	51.0
3946	2009/04/01	03:23:03	58.0	75.5	54.6	48.4	42.8
3951	2009/04/01	03:23:18	43.1	38.2	41.1	43.0	51.9
3956	2009/04/01	03:23:33	59.2	68.8	58.5	53.0	56.9
3961	2009/04/01	03:23:48	53.0	67.5	59.5	49.7	47.9
3966	2009/04/01	03:24:03	44.8	43.8	42.5	43.0	46.6
3971	2009/04/01	03:24:18	54.0	69.3	73.0	60.4	70.1
3976	2009/04/01	03:24:33	63.9	51.0	49.8	51.2	49.4
3981	2009/04/01	03:24:48	48.7	54.5	59.0	68.8	63.7
3986	2009/04/01	03:25:03	47.9	58.1	60.0	56.0	54.8
3991	2009/04/01	03:25:18	66.0	53.8	45.7	44.9	42.8
3996	2009/04/01	03:25:33	54.4	43.2	49.6	40.9	47.1
4001	2009/04/01	03:25:48	46.9	53.1	69.4	66.2	54.6
4006	2009/04/01	03:26:03	52.1	51.9	57.4	72.9	73.9
4011	2009/04/01	03:26:18	65.3	64.3	66.8	58.8	71.4
4016	2009/04/01	03:26:33	52.8	49.4	45.5	48.5	49.0
4021	2009/04/01	03:26:48	58.5	71.1	53.1	52.9	56.8
4026	2009/04/01	03:27:03	71.9	73.1	69.9	54.5	53.2
4031	2009/04/01	03:27:18	48.3	55.5	74.1	56.2	45.2
4036	2009/04/01	03:27:33	47.1	49.2	59.9	71.1	72.2
4041	2009/04/01	03:27:48	74.2	60.7	55.6	48.5	50.7
4046	2009/04/01	03:28:03	48.8	56.3	70.2	50.2	44.1
4051	2009/04/01	03:28:18	42.3	40.0	39.8	42.8	47.1
4056	2009/04/01	03:28:33	41.1	43.1	42.5	47.6	51.8
4061	2009/04/01	03:28:48	57.6	79.0	56.5	55.0	59.5
4066	2009/04/01	03:29:03	69.1	79.7	65.1	69.5	70.7
4071	2009/04/01	03:29:18	69.9	71.2	55.8	50.5	47.1
4076	2009/04/01	03:29:33	53.9	56.8	68.1	77.4	69.3
4081	2009/04/01	03:29:48	57.3	68.0	73.8	62.5	53.0
4086	2009/04/01	03:30:03	47.9	48.1	48.4	53.7	54.2
4091	2009/04/01	03:30:18	57.7	71.1	71.3	55.7	66.9
4096	2009/04/01	03:30:33	71.3	59.2	63.9	77.7	62.4
4101	2009/04/01	03:30:48	54.8	48.9	53.0	58.7	74.6
4106	2009/04/01	03:31:03	71.3	62.3	71.4	75.9	57.3
4111	2009/04/01	03:31:18	56.2	48.3	44.5	42.5	45.0
4116	2009/04/01	03:31:33	51.4	59.1	69.2	71.7	73.4
4121	2009/04/01	03:31:48	59.8	52.3	57.1	67.2	62.0
4126	2009/04/01	03:32:03	70.4	73.0	54.1	55.4	49.6
4131	2009/04/01	03:32:18	42.7	41.6	39.2	42.5	47.3
4136	2009/04/01	03:32:33	56.4	71.0	73.4	63.6	58.1
4141	2009/04/01	03:32:48	77.4	68.0	66.8	62.3	53.2
4146	2009/04/01	03:33:03	50.9	56.4	70.8	51.2	51.5
4151	2009/04/01	03:33:18	51.9	49.5	55.0	71.3	73.0
4156	2009/04/01	03:33:33	63.2	53.2	50.9	51.5	47.9
4161	2009/04/01	03:33:48	53.7	54.7	58.8	80.8	56.8
4166	2009/04/01	03:34:03	50.8	47.7	48.1	53.2	64.1
4171	2009/04/01	03:34:18	62.7	47.4	46.7	47.0	57.5
4176	2009/04/01	03:34:33	57.5	67.8	64.3	51.0	46.7
4181	2009/04/01	03:34:48	43.9	44.6	45.4	53.9	56.7
4186	2009/04/01	03:35:03	71.1	56.5	49.1	53.8	44.8
4191	2009/04/01	03:35:18	43.6	38.5	37.5	36.8	39.6
4196	2009/04/01	03:35:33	40.5	47.1	54.2	71.3	66.3
4201	2009/04/01	03:35:48	53.4	54.4	54.4	55.6	78.0
4206	2009/04/01	03:36:03	73.7	54.8	49.4	48.8	41.4
4211	2009/04/01	03:36:18	41.4	42.0	48.8	54.7	68.3
4216	2009/04/01	03:36:33	72.5	67.3	61.0	69.3	56.9
4221	2009/04/01	03:36:48	72.3	62.1	61.4	47.3	43.2
4226	2009/04/01	03:37:03	44.2	38.5	36.9	42.9	41.6
4231	2009/04/01	03:37:18	46.0	52.0	68.5	71.7	63.2
4236	2009/04/01	03:37:33	55.2	71.1	73.1	56.1	52.4
4241	2009/04/01	03:37:48	49.8	43.1	42.0	49.4	54.9
4246	2009/04/01	03:38:03	69.6	71.2	57.5	57.0	72.8
4251	2009/04/01	03:38:18	70.4	65.8	60.0	71.9	69.1
4256	2009/04/01	03:38:33	58.7	74.5	57.8	50.8	43.9
4261	2009/04/01	03:38:48	40.1	38.1	35.6	35.1	44.8
4266	2009/04/01	03:39:03	35.2	37.6	43.2	57.7	74.9
4271	2009/04/01	03:39:18	68.5	57.3	45.2	51.2	53.7
4276	2009/04/01	03:39:33	56.7	72.1	65.2	52.8	47.3
4281	2009/04/01	03:39:48	50.7	57.3	70.7	75.8	59.9
4286	2009/04/01	03:40:03	56.4	47.2	44.0	41.0	37.6
4291	2009/04/01	03:40:18	36.4	36.0	37.3	40.3	38.8
4296	2009/04/01	03:40:33	38.9	46.7	49.4	53.7	67.4
4301	2009/04/01	03:40:48	74.0	72.1	57.6	57.0	49.8
4306	2009/04/01	03:41:03	46.6	40.4	47.3	46.6	51.6
4311	2009/04/01	03:41:18	59.9	69.7	60.1	81.6	63.2
4316	2009/04/01	03:41:33	73.9	75.3	65.3	73.1	64.7
4321	2009/04/01	03:41:48	60.6	80.1	75.8	57.1	58.6
4326	2009/04/01	03:42:03	61.6	75.1	70.4	54.5	54.8
4331	2009/04/01	03:42:18	47.3	43.0	40.7	50.3	37.1
4336	2009/04/01	03:42:33	38.1	40.4	42.2	47.7	56.0
4341	2009/04/01	03:42:48	72.8	74.3	60.5	53.8	47.4
4346	2009/04/01	03:43:03	45.1	51.5	50.1	58.6	75.4
4351	2009/04/01	03:43:18	60.5	67.9	50.6	50.4	60.6
4356	2009/04/01	03:43:33	69.3	59.5	54.4	58.6	75.6
4361	2009/04/01	03:43:48	76.1	73.7	64.7	69.0	68.6
4366	2009/04/01	03:44:03	54.2	52.6	52.2	64.9	66.5
4371	2009/04/01	03:44:18	65.6	52.1	47.5	44.2	44.9
4376	2009/04/01	03:44:33	50.1	55.7	70.4	71.0	76.1
4381	2009/04/01	03:44:48	60.3	55.6	57.2	57.3	67.1

4386	2009/04/01	03:45:03	75.2	64.5	56.6	57.3	78.1
4391	2009/04/01	03:45:18	62.6	73.1	60.2	53.3	51.7
4396	2009/04/01	03:45:33	55.0	77.7	61.8	49.5	46.0
4401	2009/04/01	03:45:48	44.8	54.1	67.3	69.0	52.3
4406	2009/04/01	03:46:03	48.4	42.9	41.7	42.0	51.6
4411	2009/04/01	03:46:18	55.9	72.8	63.3	50.8	52.5
4416	2009/04/01	03:46:33	42.5	46.6	42.8	47.4	48.1
4421	2009/04/01	03:46:48	56.4	70.6	69.0	73.5	70.7
4426	2009/04/01	03:47:03	55.5	53.9	58.1	67.9	54.0
4431	2009/04/01	03:47:18	62.6	69.4	56.7	61.1	72.0
4436	2009/04/01	03:47:33	56.4	53.0	60.7	69.8	75.7
4441	2009/04/01	03:47:48	74.5	73.4	64.6	69.3	75.1
4446	2009/04/01	03:48:03	77.5	64.4	61.8	73.2	57.6
4451	2009/04/01	03:48:18	53.6	45.9	44.5	50.9	58.3
4456	2009/04/01	03:48:33	69.2	75.9	71.2	58.8	62.0
4461	2009/04/01	03:48:48	46.4	47.4	56.2	72.7	63.9
4466	2009/04/01	03:49:03	54.4	59.9	71.7	63.3	53.4
4471	2009/04/01	03:49:18	56.9	55.2	60.7	67.1	50.8
4476	2009/04/01	03:49:33	45.7	53.8	55.2	68.1	71.5
4481	2009/04/01	03:49:48	61.6	78.2	58.7	57.1	69.6
4486	2009/04/01	03:50:03	56.5	52.4	47.9	47.6	48.6
4491	2009/04/01	03:50:18	48.3	56.1	71.5	70.9	52.4
4496	2009/04/01	03:50:33	50.9	45.7	44.0	48.8	52.7
4501	2009/04/01	03:50:48	75.4	65.3	54.4	54.9	44.6
4506	2009/04/01	03:51:03	56.2	54.0	60.8	72.6	80.4
4511	2009/04/01	03:51:18	56.8	54.2	56.7	72.1	74.2
4516	2009/04/01	03:51:33	72.4	71.8	63.3	55.8	55.5
4521	2009/04/01	03:51:48	62.4	72.7	60.2	55.0	50.1
4526	2009/04/01	03:52:03	49.5	43.7	54.5	45.3	45.8
4531	2009/04/01	03:52:18	48.5	43.5	49.9	42.1	48.6
4536	2009/04/01	03:52:33	55.1	74.1	65.9	67.1	78.1
4541	2009/04/01	03:52:48	64.9	78.9	66.6	72.8	61.6
4546	2009/04/01	03:53:03	57.6	52.8	56.2	67.9	50.3
4551	2009/04/01	03:53:18	46.3	45.2	44.9	47.1	51.6
4556	2009/04/01	03:53:33	70.5	72.7	56.0	54.9	45.8
4561	2009/04/01	03:53:48	45.4	49.7	48.0	58.5	70.7
4566	2009/04/01	03:54:03	70.6	55.6	51.4	53.4	66.3
4571	2009/04/01	03:54:18	66.8	74.0	57.9	53.6	50.4
4576	2009/04/01	03:54:33	43.8	41.0	39.1	41.1	37.1
4581	2009/04/01	03:54:48	56.1	55.2	47.3	41.4	49.8
4586	2009/04/01	03:55:03	48.5	54.0	56.2	60.4	75.7
4591	2009/04/01	03:55:18	64.7	54.1	49.9	50.5	54.8
4596	2009/04/01	03:55:33	66.6	69.2	59.7	57.2	67.8
4601	2009/04/01	03:55:48	62.1	68.7	73.7	71.9	75.6
4606	2009/04/01	03:56:03	69.3	62.0	56.6	56.8	68.8
4611	2009/04/01	03:56:18	55.6	49.3	43.3	39.7	50.9
4616	2009/04/01	03:56:33	42.9	47.1	48.6	58.9	70.5
4621	2009/04/01	03:56:48	67.8	53.5	58.2	59.6	74.3
4626	2009/04/01	03:57:03	57.4	53.8	48.9	49.2	50.7
4631	2009/04/01	03:57:18	62.6	64.9	58.2	77.9	64.4
4636	2009/04/01	03:57:33	68.1	64.3	59.3	68.1	73.9
4641	2009/04/01	03:57:48	73.9	76.9	59.8	56.8	47.7
4646	2009/04/01	03:58:03	45.5	51.4	57.5	70.2	61.9
4651	2009/04/01	03:58:18	76.2	61.8	57.4	62.7	73.7
4656	2009/04/01	03:58:33	74.9	66.7	74.9	56.0	53.0
4661	2009/04/01	03:58:48	57.4	58.5	70.1	64.8	53.0
4666	2009/04/01	03:59:03	56.8	73.2	55.9	59.0	70.0
4671	2009/04/01	03:59:18	76.5	74.7	60.4	55.7	54.5
4676	2009/04/01	03:59:33	55.3	55.5	52.9	49.4	49.1
4681	2009/04/01	03:59:48	53.5	53.1	58.1	70.5	73.3
4686	2009/04/01	04:00:03	59.3	56.7	50.2	48.6	43.7
4691	2009/04/01	04:00:18	44.1	43.4	41.0	43.6	42.6
4696	2009/04/01	04:00:33	50.4	42.0	42.8	45.2	47.3
4701	2009/04/01	04:00:48	53.0	65.8	63.2	59.3	67.9
4706	2009/04/01	04:01:03	61.9	52.7	53.7	56.6	69.6
4711	2009/04/01	04:01:18	71.9	72.5	68.6	63.8	59.7
4716	2009/04/01	04:01:33	70.7	57.9	57.9	72.6	64.4
4721	2009/04/01	04:01:48	55.7	56.9	61.7	82.0	77.7
4726	2009/04/01	04:02:03	65.8	59.3	70.5	63.2	56.6
4731	2009/04/01	04:02:18	61.8	75.5	59.4	76.9	54.9
4736	2009/04/01	04:02:33	51.6	46.5	45.4	42.8	41.7
4741	2009/04/01	04:02:48	45.9	45.6	46.7	49.5	52.5
4746	2009/04/01	04:03:03	62.1	76.4	60.7	78.2	71.0
4751	2009/04/01	04:03:18	77.0	58.0	56.3	58.2	80.8
4756	2009/04/01	04:03:33	61.7	67.8	75.2	79.1	61.0
4761	2009/04/01	04:03:48	60.0	69.5	68.4	69.1	55.0
4766	2009/04/01	04:04:03	55.2	72.4	54.3	47.3	50.1
4771	2009/04/01	04:04:18	56.8	69.7	70.5	55.5	56.2
4776	2009/04/01	04:04:33	66.3	73.3	56.4	53.4	48.3
4781	2009/04/01	04:04:48	43.1	42.1	45.6	45.3	50.0
4786	2009/04/01	04:05:03	62.4	66.4	48.8	54.6	70.1
4791	2009/04/01	04:05:18	71.5	65.5	75.0	75.0	55.8
4796	2009/04/01	04:05:33	50.1	46.4	45.1	44.5	38.0
4801	2009/04/01	04:05:48	39.3	39.9	43.4	43.6	50.9
4806	2009/04/01	04:06:03	53.2	55.7	62.9	73.9	77.3
4811	2009/04/01	04:06:18	59.7	55.8	52.3	57.6	69.6
4816	2009/04/01	04:06:33	68.1	64.7	56.0	63.4	66.0
4821	2009/04/01	04:06:48	75.4	67.3	62.2	49.1	51.7
4826	2009/04/01	04:07:03	52.5	71.3	75.1	57.8	60.7
4831	2009/04/01	04:07:18	73.2	53.9	55.2	58.0	68.6
4836	2009/04/01	04:07:33	57.5	57.2	53.0	56.0	71.0
4841	2009/04/01	04:07:48	67.1	50.5	47.6	46.6	49.3
4846	2009/04/01	04:08:03	65.6	69.1	54.8	55.8	60.6
4851	2009/04/01	04:08:18	77.8	65.7	55.2	54.2	58.7
4856	2009/04/01	04:08:33	75.3	70.7	56.4	55.4	63.1
4861	2009/04/01	04:08:48	76.8	74.7	74.6	78.7	76.7
4866	2009/04/01	04:09:03	70.3	63.0	57.7	53.4	51.7
4871	2009/04/01	04:09:18	55.3	61.4	70.9	55.6	51.2
4876	2009/04/01	04:09:33	47.3	42.2	40.8	40.9	37.4

4881	2009/04/01	04:09:48	36.6	36.5	39.6	43.6	37.1
4886	2009/04/01	04:10:03	40.3	50.1	53.8	54.8	55.9
4891	2009/04/01	04:10:18	59.3	62.7	60.5	62.5	70.2
4896	2009/04/01	04:10:33	73.6	70.0	72.3	72.0	66.6
4901	2009/04/01	04:10:48	68.1	68.2	65.1	51.3	49.2
4906	2009/04/01	04:11:03	46.5	51.0	64.6	71.0	52.0
4911	2009/04/01	04:11:18	45.9	52.1	54.6	69.0	59.0
4916	2009/04/01	04:11:33	55.9	68.4	77.9	65.4	59.3
4921	2009/04/01	04:11:48	72.4	64.0	56.8	57.0	66.9
4926	2009/04/01	04:12:03	76.9	70.0	59.3	56.0	72.8
4931	2009/04/01	04:12:18	65.0	74.4	65.6	54.9	53.1
4936	2009/04/01	04:12:33	63.0	72.9	58.5	54.9	55.1
4941	2009/04/01	04:12:48	50.8	59.7	66.1	54.5	60.9
4946	2009/04/01	04:13:03	75.2	53.7	48.5	47.1	45.1
4951	2009/04/01	04:13:18	40.8	41.5	43.6	50.0	57.2
4956	2009/04/01	04:13:33	72.8	78.5	65.7	57.1	66.6
4961	2009/04/01	04:13:48	72.7	72.7	59.4	73.9	68.7
4966	2009/04/01	04:14:03	51.7	50.9	44.4	43.1	47.0
4971	2009/04/01	04:14:18	44.2	46.0	50.0	57.2	69.7
4976	2009/04/01	04:14:33	71.0	52.6	60.1	45.6	42.8
4981	2009/04/01	04:14:48	40.2	41.6	43.1	39.7	38.8
4986	2009/04/01	04:15:03	39.7	40.9	46.1	45.7	50.4
4991	2009/04/01	04:15:18	64.6	62.5	46.7	44.2	44.6
4996	2009/04/01	04:15:33	43.4	45.8	49.2	58.8	54.9
5001	2009/04/01	04:15:48	59.0	76.6	72.1	58.7	68.9
5006	2009/04/01	04:16:03	68.1	53.4	53.8	44.4	43.9
5011	2009/04/01	04:16:18	49.7	63.8	75.7	56.7	53.0
5016	2009/04/01	04:16:33	47.2	45.1	57.0	65.4	75.1
5021	2009/04/01	04:16:48	56.8	53.8	46.8	43.5	42.0
5026	2009/04/01	04:17:03	48.5	52.0	65.0	76.3	61.8
5031	2009/04/01	04:17:18	69.0	60.0	71.5	62.9	48.6
5036	2009/04/01	04:17:33	43.9	44.5	42.3	42.6	49.9
5041	2009/04/01	04:17:48	69.8	59.7	54.7	56.8	68.5
5046	2009/04/01	04:18:03	65.1	51.9	57.0	70.9	62.8
5051	2009/04/01	04:18:18	55.2	54.1	58.3	77.1	56.3
5056	2009/04/01	04:18:33	49.0	50.7	48.6	57.7	73.5
5061	2009/04/01	04:18:48	56.9	47.3	46.5	47.9	50.4
5066	2009/04/01	04:19:03	54.4	72.0	76.2	56.4	53.7
5071	2009/04/01	04:19:18	52.0	65.6	71.1	72.7	54.3
5076	2009/04/01	04:19:33	49.2	50.1	55.4	64.8	76.1
5081	2009/04/01	04:19:48	71.7	74.2	73.4	74.0	69.9
5086	2009/04/01	04:20:03	69.3	60.7	57.0	57.7	71.5
5091	2009/04/01	04:20:18	74.6	70.5	76.1	66.0	55.5
5096	2009/04/01	04:20:33	53.9	44.2	43.6	44.1	40.0
5101	2009/04/01	04:20:48	38.5	45.2	44.6	42.7	47.4
5106	2009/04/01	04:21:03	50.7	53.6	60.3	69.5	56.6
5111	2009/04/01	04:21:18	53.0	56.6	69.1	76.3	70.6
5116	2009/04/01	04:21:33	58.4	51.2	45.0	42.9	38.0
5121	2009/04/01	04:21:48	40.3	42.1	42.7	41.3	41.5
5126	2009/04/01	04:22:03	43.5	45.9	54.5	64.7	70.6
5131	2009/04/01	04:22:18	53.2	61.9	71.9	71.1	75.3
5136	2009/04/01	04:22:33	61.7	57.5	49.2	45.8	47.4
5141	2009/04/01	04:22:48	48.1	55.4	68.4	49.1	44.6
5146	2009/04/01	04:23:03	42.8	42.7	47.1	50.3	63.7
5151	2009/04/01	04:23:18	77.1	59.8	57.8	52.4	56.3
5156	2009/04/01	04:23:33	59.3	71.9	65.6	52.4	53.0
5161	2009/04/01	04:23:48	61.2	68.2	49.3	46.1	54.3
5166	2009/04/01	04:24:03	50.3	70.1	63.9	51.8	48.8
5171	2009/04/01	04:24:18	44.6	44.4	45.0	41.2	46.4
5176	2009/04/01	04:24:33	51.1	64.6	74.4	72.0	66.6
5181	2009/04/01	04:24:48	77.7	62.3	58.4	54.5	74.8
5186	2009/04/01	04:25:03	67.8	55.5	51.2	57.5	72.0
5191	2009/04/01	04:25:18	60.9	70.5	62.7	50.5	51.1
5196	2009/04/01	04:25:33	50.9	57.2	70.8	53.4	43.6
5201	2009/04/01	04:25:48	43.2	47.4	54.0	64.8	76.3
5206	2009/04/01	04:26:03	72.2	66.6	67.6	68.1	53.7
5211	2009/04/01	04:26:18	51.0	44.9	42.9	41.2	41.1
5216	2009/04/01	04:26:33	48.3	50.7	56.6	78.3	73.1
5221	2009/04/01	04:26:48	61.6	70.7	52.2	50.9	52.4
5226	2009/04/01	04:27:03	43.2	47.2	58.7	65.2	66.3
5231	2009/04/01	04:27:18	53.4	53.6	58.0	68.6	73.8
5236	2009/04/01	04:27:33	67.4	68.6	74.5	56.6	56.0
5241	2009/04/01	04:27:48	53.0	62.2	73.7	65.2	53.9
5246	2009/04/01	04:28:03	55.2	54.0	63.1	63.3	50.8
5251	2009/04/01	04:28:18	50.2	54.6	73.8	62.1	57.8
5256	2009/04/01	04:28:33	73.5	65.2	53.6	53.0	59.7
5261	2009/04/01	04:28:48	72.4	51.9	52.8	56.9	73.2
5266	2009/04/01	04:29:03	71.9	55.1	55.5	49.9	50.2
5271	2009/04/01	04:29:18	67.3	75.1	56.3	51.8	47.5
5276	2009/04/01	04:29:33	41.8	40.2	38.6	36.1	36.3
5281	2009/04/01	04:29:48	37.6	38.4	45.7	52.4	51.1
5286	2009/04/01	04:30:03	60.7	71.6	74.1	64.2	69.7
5291	2009/04/01	04:30:18	74.2	69.5	59.3	75.6	58.5
5296	2009/04/01	04:30:33	56.5	59.8	72.3	59.8	55.1
5301	2009/04/01	04:30:48	59.9	73.4	58.9	55.5	48.6
5306	2009/04/01	04:31:03	45.3	40.8	40.2	44.3	56.7
5311	2009/04/01	04:31:18	72.5	69.7	56.6	53.7	50.7
5316	2009/04/01	04:31:33	49.5	56.5	71.1	70.3	57.0
5321	2009/04/01	04:31:48	55.4	68.4	75.5	60.5	72.6
5326	2009/04/01	04:32:03	64.0	73.1	59.6	60.3	75.2
5331	2009/04/01	04:32:18	58.9	57.1	57.0	64.2	69.1
5336	2009/04/01	04:32:33	57.2	70.3	66.0	72.7	60.5
5341	2009/04/01	04:32:48	71.9	68.7	53.9	51.5	45.3
5346	2009/04/01	04:33:03	54.3	55.1	74.2	73.2	57.6
5351	2009/04/01	04:33:18	57.8	76.3	56.3	50.8	43.5
5356	2009/04/01	04:33:33	46.8	55.4	48.0	58.3	70.5
5361	2009/04/01	04:33:48	54.4	49.5	45.5	42.2	41.1
5366	2009/04/01	04:34:03	39.0	42.9	47.6	48.4	58.7
5371	2009/04/01	04:34:18	73.0	56.0	48.5	47.7	46.7

5376	2009/04/01	04:34:33	53.8	71.6	62.9	70.2	76.6
5381	2009/04/01	04:34:48	55.5	48.0	43.9	40.9	43.3
5386	2009/04/01	04:35:03	45.4	43.5	47.4	59.4	64.5
5391	2009/04/01	04:35:18	44.9	45.8	44.1	48.0	55.2
5396	2009/04/01	04:35:33	67.1	74.4	65.5	70.6	59.6
5401	2009/04/01	04:35:48	69.9	58.7	55.5	54.4	73.5
5406	2009/04/01	04:36:03	59.6	72.2	66.5	60.3	74.9
5411	2009/04/01	04:36:18	72.8	55.0	52.1	51.0	43.4
5416	2009/04/01	04:36:33	40.2	40.3	43.1	41.7	44.7
5421	2009/04/01	04:36:48	44.4	50.9	60.6	72.9	62.1
5426	2009/04/01	04:37:03	57.7	50.5	53.8	49.3	48.2
5431	2009/04/01	04:37:18	51.4	52.8	54.7	56.8	65.6
5436	2009/04/01	04:37:33	74.0	62.8	67.8	55.1	58.8
5441	2009/04/01	04:37:48	73.0	55.5	65.3	66.3	52.7
5446	2009/04/01	04:38:03	45.9	43.3	42.8	39.7	41.6
5451	2009/04/01	04:38:18	42.3	46.5	51.1	66.5	75.7
5456	2009/04/01	04:38:33	66.8	56.1	52.7	45.5	48.3
5461	2009/04/01	04:38:48	42.3	44.0	44.8	48.3	54.3
5466	2009/04/01	04:39:03	71.2	63.6	51.5	49.8	58.1
5471	2009/04/01	04:39:18	64.4	70.8	70.2	77.8	70.3
5476	2009/04/01	04:39:33	69.3	67.7	59.3	63.4	75.4
5481	2009/04/01	04:39:48	60.3	55.9	76.8	63.6	66.3
5486	2009/04/01	04:40:03	52.0	46.4	45.0	49.1	51.1
5491	2009/04/01	04:40:18	58.5	74.4	52.9	49.5	49.1
5496	2009/04/01	04:40:33	58.6	72.7	54.1	46.6	42.3
5501	2009/04/01	04:40:48	40.5	39.6	40.9	50.6	49.9
5506	2009/04/01	04:41:03	52.6	63.7	74.5	59.0	55.6
5511	2009/04/01	04:41:18	48.4	45.5	39.2	39.5	39.0
5516	2009/04/01	04:41:33	46.1	34.6	36.6	38.1	42.0
5521	2009/04/01	04:41:48	47.3	47.9	50.0	59.2	69.0
5526	2009/04/01	04:42:03	70.5	54.1	49.0	48.1	49.1
5531	2009/04/01	04:42:18	54.3	60.6	74.8	77.6	76.5
5536	2009/04/01	04:42:33	75.8	68.8	77.6	59.8	60.1
5541	2009/04/01	04:42:48	70.4	58.2	54.0	49.9	45.2
5546	2009/04/01	04:43:03	50.3	55.7	66.9	57.3	69.8
5551	2009/04/01	04:43:18	52.5	55.6	67.4	58.5	64.1
5556	2009/04/01	04:43:33	74.8	56.2	54.8	52.1	57.4
5561	2009/04/01	04:43:48	75.4	66.3	63.3	47.9	44.8
5566	2009/04/01	04:44:03	41.5	40.5	41.8	46.0	50.8
5571	2009/04/01	04:44:18	56.5	69.6	59.1	51.9	50.1
5576	2009/04/01	04:44:33	41.2	41.0	52.4	50.7	54.9
5581	2009/04/01	04:44:48	72.0	62.9	50.5	54.9	54.4
5586	2009/04/01	04:45:03	62.8	72.0	55.3	54.1	48.5
5591	2009/04/01	04:45:18	46.8	43.3	51.6	56.2	70.1
5596	2009/04/01	04:45:33	60.0	52.5	51.0	56.5	72.7
5601	2009/04/01	04:45:48	66.9	72.6	56.5	54.5	67.0
5606	2009/04/01	04:46:03	68.3	52.2	52.5	46.6	51.6
5611	2009/04/01	04:46:18	51.8	68.3	73.7	59.3	51.3
5616	2009/04/01	04:46:33	47.3	52.9	58.5	71.5	55.4
5621	2009/04/01	04:46:48	57.7	71.6	69.2	72.4	57.7
5626	2009/04/01	04:47:03	56.5	62.1	74.7	56.5	54.3
5631	2009/04/01	04:47:18	56.2	73.1	67.3	55.4	55.2
5636	2009/04/01	04:47:33	66.9	67.1	51.4	46.2	43.5
5641	2009/04/01	04:47:48	45.3	51.0	56.1	69.9	74.3
5646	2009/04/01	04:48:03	57.4	74.5	57.9	73.6	70.0
5651	2009/04/01	04:48:18	55.8	52.7	52.2	53.2	63.4
5656	2009/04/01	04:48:33	65.5	64.1	74.2	68.8	63.7
5661	2009/04/01	04:48:48	70.8	75.1	71.7	61.3	71.5
5666	2009/04/01	04:49:03	65.5	70.9	58.3	69.5	68.7
5671	2009/04/01	04:49:18	54.2	54.0	51.9	63.3	78.2
5676	2009/04/01	04:49:33	60.7	52.6	52.0	54.3	63.7
5681	2009/04/01	04:49:48	69.5	63.4	51.1	59.6	71.3
5686	2009/04/01	04:50:03	65.4	73.2	70.0	56.6	68.9
5691	2009/04/01	04:50:18	73.1	54.2	52.8	53.7	56.5
5696	2009/04/01	04:50:33	73.4	67.0	54.0	54.4	64.6
5701	2009/04/01	04:50:48	73.1	77.7	64.8	57.5	53.8
5706	2009/04/01	04:51:03	58.1	70.1	72.9	63.2	76.3
5711	2009/04/01	04:51:18	65.6	75.3	59.3	71.9	64.2
5716	2009/04/01	04:51:33	55.0	50.0	45.4	49.1	50.1
5721	2009/04/01	04:51:48	58.3	76.6	54.3	54.1	44.1
5726	2009/04/01	04:52:03	48.3	40.8	37.2	37.7	38.4
5731	2009/04/01	04:52:18	40.5	42.9	41.0	44.5	53.8
5736	2009/04/01	04:52:33	73.9	63.0	53.5	53.6	57.9
5741	2009/04/01	04:52:48	66.1	67.8	75.5	74.1	78.7
5746	2009/04/01	04:53:03	65.0	74.7	74.5	57.9	54.5
5751	2009/04/01	04:53:18	59.3	76.0	60.1	71.0	78.2
5756	2009/04/01	04:53:33	76.1	66.6	70.9	51.0	52.2
5761	2009/04/01	04:53:48	50.2	55.7	65.8	75.4	96.0
5766	2009/04/01	04:54:03	76.6	68.6	63.9	68.0	68.6
5771	2009/04/01	04:54:18	60.0	55.3	62.1	68.3	51.9
5776	2009/04/01	04:54:33	55.1	75.6	57.3	52.1	51.6
5781	2009/04/01	04:54:48	55.7	77.9	62.1	76.3	67.2
5786	2009/04/01	04:55:03	77.4	70.2	76.1	57.9	53.3
5791	2009/04/01	04:55:18	60.7	68.4	51.5	44.6	42.6
5796	2009/04/01	04:55:33	40.3	42.8	50.3	60.8	73.8
5801	2009/04/01	04:55:48	78.4	61.0	73.5	56.5	69.3
5806	2009/04/01	04:56:03	71.8	56.7	62.3	75.3	76.5
5811	2009/04/01	04:56:18	60.5	69.7	64.3	59.0	54.6
5816	2009/04/01	04:56:33	54.8	65.7	74.6	55.6	50.4
5821	2009/04/01	04:56:48	45.2	45.1	40.4	47.9	52.8
5826	2009/04/01	04:57:03	67.0	70.9	55.5	51.5	48.3
5831	2009/04/01	04:57:18	44.8	47.0	46.2	52.9	68.9
5836	2009/04/01	04:57:33	61.4	72.2	54.5	51.4	45.7
5841	2009/04/01	04:57:48	49.6	54.5	62.6	66.2	57.3
5846	2009/04/01	04:58:03	64.1	69.7	69.9	68.4	64.4
5851	2009/04/01	04:58:18	62.9	78.5	62.1	54.6	48.3
5856	2009/04/01	04:58:33	45.9	41.7	37.8	38.5	41.5
5861	2009/04/01	04:58:48	47.3	42.8	41.1	39.3	46.2
5866	2009/04/01	04:59:03	45.3	50.3	62.6	63.9	48.1

5871	2009/04/01	04:59:18	50.0	41.0	39.3	40.9	45.6
5876	2009/04/01	04:59:33	61.0	51.3	51.1	53.4	71.0
5881	2009/04/01	04:59:48	67.1	67.3	53.6	46.3	42.9
5886	2009/04/01	05:00:03	39.4	48.4	46.9	44.6	38.7
5891	2009/04/01	05:00:18	42.4	38.5	42.8	36.5	43.3
5896	2009/04/01	05:00:33	36.1	38.2	40.1	42.3	48.8
5901	2009/04/01	05:00:48	54.0	55.1	65.9	63.8	54.4
5906	2009/04/01	05:01:03	50.9	56.6	73.6	60.7	55.8
5911	2009/04/01	05:01:18	57.8	70.6	75.8	74.2	58.8
5916	2009/04/01	05:01:33	54.6	48.5	43.1	41.2	40.1
5921	2009/04/01	05:01:48	40.1	49.4	58.3	71.9	59.2
5926	2009/04/01	05:02:03	55.3	76.6	59.2	52.6	49.2
5931	2009/04/01	05:02:18	57.9	71.4	51.5	49.2	44.1
5936	2009/04/01	05:02:33	48.7	45.4	53.2	65.9	71.4
5941	2009/04/01	05:02:48	65.8	67.4	49.5	45.7	43.6
5946	2009/04/01	05:03:03	50.6	58.4	73.1	60.9	54.7
5951	2009/04/01	05:03:18	50.5	55.2	58.8	69.2	59.9
5956	2009/04/01	05:03:33	77.4	56.7	55.0	61.1	75.9
5961	2009/04/01	05:03:48	59.3	71.8	65.0	52.2	57.1
5966	2009/04/01	05:04:03	46.9	52.2	65.3	76.9	68.0
5971	2009/04/01	05:04:18	57.0	54.5	57.6	70.0	52.9
5976	2009/04/01	05:04:33	53.8	75.2	55.1	49.7	56.1
5981	2009/04/01	05:04:48	70.4	55.7	73.3	58.2	44.3
5986	2009/04/01	05:05:03	41.2	39.7	41.7	39.2	46.9
5991	2009/04/01	05:05:18	48.5	52.9	54.8	68.9	70.3
5996	2009/04/01	05:05:33	69.1	61.2	67.0	60.4	73.6
6001	2009/04/01	05:05:48	71.9	55.8	55.5	55.2	68.4
6006	2009/04/01	05:06:03	65.3	72.0	67.3	57.2	58.0
6011	2009/04/01	05:06:18	56.8	60.9	73.5	54.1	49.5
6016	2009/04/01	05:06:33	46.1	52.6	60.7	78.1	61.4
6021	2009/04/01	05:06:48	59.2	74.9	51.1	47.8	44.1
6026	2009/04/01	05:07:03	49.6	54.1	67.1	53.9	47.4
6031	2009/04/01	05:07:18	47.9	42.0	40.8	46.1	43.2
6036	2009/04/01	05:07:33	49.6	53.2	57.0	67.6	70.7
6041	2009/04/01	05:07:48	52.2	48.0	43.2	40.3	42.5
6046	2009/04/01	05:08:03	43.4	50.1	53.9	64.2	70.6
6051	2009/04/01	05:08:18	51.8	47.2	46.8	51.5	58.9
6056	2009/04/01	05:08:33	76.9	55.7	53.2	61.8	69.3
6061	2009/04/01	05:08:48	52.7	49.1	51.5	60.6	72.7
6066	2009/04/01	05:09:03	52.9	49.8	41.3	41.9	40.2
6071	2009/04/01	05:09:18	44.9	39.1	45.4	43.1	48.5
6076	2009/04/01	05:09:33	55.6	68.7	70.3	72.7	66.6
6081	2009/04/01	05:09:48	72.4	66.6	70.6	53.9	49.4
6086	2009/04/01	05:10:03	46.1	41.8	39.0	38.3	36.2
6091	2009/04/01	05:10:18	36.5	35.1	33.9	34.8	33.0
6096	2009/04/01	05:10:33	33.2	34.5	33.6	35.2	37.0
6101	2009/04/01	05:10:48	39.0	38.7	44.4	43.8	42.0
6106	2009/04/01	05:11:03	48.5	46.8	44.4	44.5	43.3
6111	2009/04/01	05:11:18	43.3	48.7	55.0	65.1	74.5
6116	2009/04/01	05:11:33	70.0	78.6	64.3	56.1	55.9
6121	2009/04/01	05:11:48	71.9	76.4	71.5	55.0	57.7
6126	2009/04/01	05:12:03	72.5	66.7	60.5	51.4	43.0
6131	2009/04/01	05:12:18	43.8	45.2	54.9	62.5	77.3
6136	2009/04/01	05:12:33	59.2	53.2	49.2	53.0	53.3
6141	2009/04/01	05:12:48	67.5	61.1	48.8	46.5	40.9
6146	2009/04/01	05:13:03	42.7	42.4	51.9	60.9	76.8
6151	2009/04/01	05:13:18	57.8	53.2	49.7	47.5	46.0
6156	2009/04/01	05:13:33	50.3	51.6	55.7	68.0	73.0
6161	2009/04/01	05:13:48	60.3	52.0	49.5	46.6	49.0
6166	2009/04/01	05:14:03	45.4	48.2	52.5	51.0	57.7
6171	2009/04/01	05:14:18	70.6	74.7	69.3	71.4	68.2
6176	2009/04/01	05:14:33	73.3	67.5	62.4	50.6	47.4
6181	2009/04/01	05:14:48	45.2	41.7	39.8	41.1	42.9
6186	2009/04/01	05:15:03	40.2	44.4	40.7	43.1	46.4
6191	2009/04/01	05:15:18	40.0	47.6	50.8	49.0	56.8
6196	2009/04/01	05:15:33	70.4	69.3	65.6	66.5	50.3
6201	2009/04/01	05:15:48	46.4	48.3	51.7	56.4	63.9
6206	2009/04/01	05:16:03	80.0	74.8	72.5	70.7	60.6
6211	2009/04/01	05:16:18	60.3	75.2	68.4	57.8	53.8
6216	2009/04/01	05:16:33	49.5	43.2	48.1	42.2	45.8
6221	2009/04/01	05:16:48	43.9	45.1	59.1	48.0	50.8
6226	2009/04/01	05:17:03	46.1	47.3	51.9	51.0	58.8
6231	2009/04/01	05:17:18	71.6	54.3	52.3	55.8	78.0
6236	2009/04/01	05:17:33	61.2	52.0	50.4	44.6	43.9
6241	2009/04/01	05:17:48	41.4	42.3	40.9	46.1	41.0
6246	2009/04/01	05:18:03	41.9	39.5	43.1	46.2	50.7
6251	2009/04/01	05:18:18	55.7	67.9	63.1	74.8	74.0
6256	2009/04/01	05:18:33	68.7	58.9	52.8	54.4	51.2
6261	2009/04/01	05:18:48	56.7	73.7	72.6	72.8	62.6
6266	2009/04/01	05:19:03	58.9	70.6	64.3	71.8	59.0
6271	2009/04/01	05:19:18	49.3	45.6	44.9	53.3	56.7
6276	2009/04/01	05:19:33	57.7	77.3	58.2	55.7	66.6
6281	2009/04/01	05:19:48	67.9	73.3	72.0	56.9	50.9
6286	2009/04/01	05:20:03	45.6	46.0	44.6	48.9	48.5
6291	2009/04/01	05:20:18	57.6	71.7	54.0	52.7	52.4
6296	2009/04/01	05:20:33	56.9	74.6	73.7	61.0	69.1
6301	2009/04/01	05:20:48	58.7	59.7	50.6	47.0	40.6
6306	2009/04/01	05:21:03	37.2	50.2	34.6	35.3	40.6
6311	2009/04/01	05:21:18	40.8	40.1	35.5	41.0	37.8
6316	2009/04/01	05:21:33	38.7	41.9	44.9	43.4	51.4
6321	2009/04/01	05:21:48	69.6	62.8	47.8	51.2	52.0
6326	2009/04/01	05:22:03	53.5	56.2	58.0	54.1	49.2
6331	2009/04/01	05:22:18	47.7	51.6	69.9	57.6	45.6
6336	2009/04/01	05:22:33	43.4	41.2	50.2	57.3	74.6
6341	2009/04/01	05:22:48	63.2	67.8	61.7	56.5	64.1
6346	2009/04/01	05:23:03	74.4	58.2	55.6	74.7	67.7
6351	2009/04/01	05:23:18	67.3	73.2	72.9	58.9	60.8
6356	2009/04/01	05:23:33	74.8	80.3	73.9	78.5	59.9
6361	2009/04/01	05:23:48	52.7	46.2	46.3	46.0	55.5

6366	2009/04/01	05:24:03	60.2	67.9	63.4	66.4	65.9
6371	2009/04/01	05:24:18	52.9	48.5	50.4	52.6	51.5
6376	2009/04/01	05:24:33	56.9	70.8	56.7	59.7	73.8
6381	2009/04/01	05:24:48	61.8	51.1	50.2	46.7	54.8
6386	2009/04/01	05:25:03	75.0	62.0	67.2	48.7	47.4
6391	2009/04/01	05:25:18	44.0	40.7	40.9	37.4	41.4
6396	2009/04/01	05:25:33	39.2	44.9	38.6	40.4	41.3
6401	2009/04/01	05:25:48	39.7	40.6	51.0	58.7	73.2
6406	2009/04/01	05:26:03	53.7	49.9	49.2	45.9	48.5
6411	2009/04/01	05:26:18	49.0	52.2	66.8	64.1	53.0
6416	2009/04/01	05:26:33	55.3	53.5	57.4	71.0	52.5
6421	2009/04/01	05:26:48	53.9	56.7	68.4	61.9	53.8
6426	2009/04/01	05:27:03	59.7	75.4	71.9	55.2	52.8
6431	2009/04/01	05:27:18	55.2	55.3	62.3	71.3	52.4
6436	2009/04/01	05:27:33	56.2	67.0	58.7	44.8	45.2
6441	2009/04/01	05:27:48	51.7	56.0	72.2	75.5	60.0
6446	2009/04/01	05:28:03	74.5	66.0	80.6	72.9	67.5
6451	2009/04/01	05:28:18	70.7	65.8	55.3	58.2	68.7
6456	2009/04/01	05:28:33	74.7	72.6	70.8	58.4	53.4
6461	2009/04/01	05:28:48	71.8	64.2	58.0	76.7	58.3
6466	2009/04/01	05:29:03	66.5	72.0	51.5	48.1	48.9
6471	2009/04/01	05:29:18	49.4	50.0	56.0	80.5	55.2
6476	2009/04/01	05:29:33	51.2	51.6	52.7	61.9	68.6
6481	2009/04/01	05:29:48	62.3	49.0	46.7	48.6	42.6
6486	2009/04/01	05:30:03	43.0	45.6	44.2	48.8	47.1
6491	2009/04/01	05:30:18	51.7	64.3	65.5	55.8	62.6
6496	2009/04/01	05:30:33	76.9	56.6	58.0	71.0	66.7
6501	2009/04/01	05:30:48	60.7	69.0	52.2	46.5	43.9
6506	2009/04/01	05:31:03	44.2	51.9	57.4	71.6	75.1
6511	2009/04/01	05:31:18	61.2	52.8	48.6	57.0	55.4
6516	2009/04/01	05:31:33	66.1	74.3	72.2	56.1	56.8
6521	2009/04/01	05:31:48	70.5	68.6	69.3	53.2	52.1
6526	2009/04/01	05:32:03	51.0	56.8	75.6	59.2	64.2
6531	2009/04/01	05:32:18	68.1	50.2	52.1	57.4	75.1
6536	2009/04/01	05:32:33	67.3	74.5	64.1	65.9	77.0
6541	2009/04/01	05:32:48	66.7	68.4	65.6	66.7	49.8
6546	2009/04/01	05:33:03	47.7	44.6	40.6	36.9	35.4
6551	2009/04/01	05:33:18	38.5	43.2	37.9	35.2	34.9
6556	2009/04/01	05:33:33	34.9	36.0	33.8	39.2	47.1
6561	2009/04/01	05:33:48	38.3	39.3	42.3	43.7	43.2
6566	2009/04/01	05:34:03	49.6	67.4	60.4	45.2	45.9
6571	2009/04/01	05:34:18	39.1	40.9	43.6	47.8	51.4
6576	2009/04/01	05:34:33	60.3	69.9	73.9	71.5	63.8
6581	2009/04/01	05:34:48	56.4	51.1	49.0	47.6	52.8
6586	2009/04/01	05:35:03	53.7	67.7	75.2	70.9	73.7
6591	2009/04/01	05:35:18	71.1	65.9	70.2	67.4	78.0
6596	2009/04/01	05:35:33	68.4	58.4	52.5	48.5	52.5
6601	2009/04/01	05:35:48	57.4	39.3	47.9	42.1	45.8
6606	2009/04/01	05:36:03	55.0	72.1	67.2	73.1	68.6
6611	2009/04/01	05:36:18	59.8	71.0	56.9	54.1	61.7
6616	2009/04/01	05:36:33	72.8	69.3	55.0	54.7	58.4
6621	2009/04/01	05:36:48	73.3	75.7	70.7	64.9	75.4
6626	2009/04/01	05:37:03	76.8	75.7	58.9	53.7	52.8
6631	2009/04/01	05:37:18	58.3	72.0	53.5	47.0	44.0
6636	2009/04/01	05:37:33	42.7	41.1	38.1	41.4	45.7
6641	2009/04/01	05:37:48	41.0	44.0	45.8	46.8	50.9
6646	2009/04/01	05:38:03	55.5	70.0	71.3	64.9	54.8
6651	2009/04/01	05:38:18	47.1	44.2	47.3	46.0	50.0
6656	2009/04/01	05:38:33	56.5	67.2	76.6	75.6	71.2
6661	2009/04/01	05:38:48	56.4	51.2	49.0	49.2	48.7
6666	2009/04/01	05:39:03	53.5	72.3	64.6	54.4	58.9
6671	2009/04/01	05:39:18	77.4	58.6	48.9	45.7	47.0
6676	2009/04/01	05:39:33	39.8	44.4	45.5	53.6	47.1
6681	2009/04/01	05:39:48	51.3	49.2	54.5	73.4	57.3
6686	2009/04/01	05:40:03	53.0	44.9	40.8	46.6	47.0
6691	2009/04/01	05:40:18	51.4	54.5	76.0	61.9	70.0
6696	2009/04/01	05:40:33	62.9	53.6	58.7	60.5	71.4
6701	2009/04/01	05:40:48	59.7	56.6	49.3	48.5	43.8
6706	2009/04/01	05:41:03	48.9	33.9	42.1	47.8	34.2
6711	2009/04/01	05:41:18	33.9	49.4	37.7	35.9	46.2
6716	2009/04/01	05:41:33	51.5	57.4	74.1	71.3	65.7
6721	2009/04/01	05:41:48	55.2	55.1	53.3	52.3	58.3
6726	2009/04/01	05:42:03	74.8	66.8	67.9	64.5	53.7
6731	2009/04/01	05:42:18	50.2	52.8	65.6	65.4	77.0
6736	2009/04/01	05:42:33	75.2	55.6	51.7	50.3	50.4
6741	2009/04/01	05:42:48	56.4	74.8	55.8	49.3	56.9
6746	2009/04/01	05:43:03	57.0	66.7	67.8	54.7	54.2
6751	2009/04/01	05:43:18	62.1	69.4	50.2	47.5	48.5
6756	2009/04/01	05:43:33	39.6	45.7	46.4	47.4	53.3
6761	2009/04/01	05:43:48	56.2	68.2	61.9	64.1	70.4
6766	2009/04/01	05:44:03	56.7	49.7	46.0	48.3	53.8
6771	2009/04/01	05:44:18	54.3	58.5	70.9	71.2	54.4
6776	2009/04/01	05:44:33	46.8	45.7	41.6	50.4	39.4
6781	2009/04/01	05:44:48	42.8	38.2	39.8	47.1	46.4
6786	2009/04/01	05:45:03	52.5	52.4	68.6	71.0	53.7
6791	2009/04/01	05:45:18	51.2	49.7	56.3	54.4	60.3
6796	2009/04/01	05:45:33	79.2	67.3	50.5	48.3	45.8
6801	2009/04/01	05:45:48	41.6	47.4	52.7	58.3	68.3
6806	2009/04/01	05:46:03	69.5	74.9	78.9	62.4	66.4
6811	2009/04/01	05:46:18	75.8	72.1	60.3	55.0	55.5
6816	2009/04/01	05:46:33	71.8	55.2	47.5	43.1	38.6
6821	2009/04/01	05:46:48	39.0	36.1	35.7	33.6	34.1
6826	2009/04/01	05:47:03	35.1	35.2	33.5	34.5	40.7
6831	2009/04/01	05:47:18	40.5	45.3	48.9	55.0	69.1
6836	2009/04/01	05:47:33	65.3	75.6	60.8	48.4	47.4
6841	2009/04/01	05:47:48	50.6	51.7	59.3	70.2	54.6
6846	2009/04/01	05:48:03	54.7	60.6	71.2	54.8	54.2
6851	2009/04/01	05:48:18	53.1	54.3	69.6	61.1	52.2
6856	2009/04/01	05:48:33	49.0	51.7	53.6	68.1	54.1

6861	2009/04/01	05:48:48	56.1	59.2	72.0	58.5	52.8
6866	2009/04/01	05:49:03	50.5	50.8	52.6	65.3	66.2
6871	2009/04/01	05:49:18	70.9	64.6	68.7	50.7	48.9
6876	2009/04/01	05:49:33	44.1	42.5	40.7	45.3	49.8
6881	2009/04/01	05:49:48	52.0	57.0	78.4	72.1	56.4
6886	2009/04/01	05:50:03	50.1	51.0	40.8	38.7	38.2
6891	2009/04/01	05:50:18	38.6	39.4	42.6	51.1	57.5
6896	2009/04/01	05:50:33	72.3	66.1	65.5	55.0	51.2
6901	2009/04/01	05:50:48	50.5	56.8	70.4	52.1	51.1
6906	2009/04/01	05:51:03	49.1	47.3	51.6	61.9	73.1
6911	2009/04/01	05:51:18	60.7	59.8	51.3	43.4	43.7
6916	2009/04/01	05:51:33	40.2	34.5	33.6	33.8	34.1
6921	2009/04/01	05:51:48	38.7	42.7	46.1	45.8	52.2
6926	2009/04/01	05:52:03	67.2	63.3	71.2	68.5	53.2
6931	2009/04/01	05:52:18	54.8	46.3	52.1	56.2	68.9
6936	2009/04/01	05:52:33	73.4	57.3	53.7	56.6	72.4
6941	2009/04/01	05:52:48	54.2	51.9	56.0	79.7	59.2
6946	2009/04/01	05:53:03	60.7	67.3	50.2	45.8	48.8
6951	2009/04/01	05:53:18	49.8	57.4	75.1	65.6	73.6
6956	2009/04/01	05:53:33	59.0	51.8	46.3	49.4	44.2
6961	2009/04/01	05:53:48	42.1	41.2	39.8	40.5	45.3
6966	2009/04/01	05:54:03	48.6	48.0	54.5	59.5	74.4
6971	2009/04/01	05:54:18	77.7	66.6	60.4	70.1	68.3
6976	2009/04/01	05:54:33	55.0	59.8	72.2	52.6	52.4
6981	2009/04/01	05:54:48	46.4	55.2	56.4	70.2	64.6
6986	2009/04/01	05:55:03	73.6	73.3	61.3	56.6	54.7
6991	2009/04/01	05:55:18	49.6	44.2	45.0	45.1	49.2
6996	2009/04/01	05:55:33	45.5	50.4	63.9	63.6	48.3
7001	2009/04/01	05:55:48	50.5	50.6	52.8	71.5	62.9
7006	2009/04/01	05:56:03	54.7	57.7	70.4	53.1	51.8
7011	2009/04/01	05:56:18	54.4	69.1	63.6	54.4	57.8
7016	2009/04/01	05:56:33	81.5	57.1	48.9	46.8	45.7
7021	2009/04/01	05:56:48	46.5	47.1	51.5	57.5	69.7
7026	2009/04/01	05:57:03	54.6	52.6	77.0	56.5	51.5
7031	2009/04/01	05:57:18	46.1	46.0	43.8	49.5	47.2
7036	2009/04/01	05:57:33	59.7	62.1	75.2	69.1	57.8
7041	2009/04/01	05:57:48	56.8	51.8	55.4	56.9	62.1
7046	2009/04/01	05:58:03	74.1	59.0	54.1	51.2	47.1
7051	2009/04/01	05:58:18	43.7	46.4	39.5	41.6	43.7
7056	2009/04/01	05:58:33	53.3	61.6	70.7	57.9	54.3
7061	2009/04/01	05:58:48	56.2	68.6	55.4	58.7	69.2
7066	2009/04/01	05:59:03	58.3	65.3	72.6	55.7	52.5
7071	2009/04/01	05:59:18	58.4	61.3	74.6	76.1	62.0
7076	2009/04/01	05:59:33	60.3	53.8	50.3	50.2	51.7
7081	2009/04/01	05:59:48	55.4	74.8	68.6	71.9	59.6
7086	2009/04/01	06:00:03	63.9	74.5	56.4	58.0	54.2
7091	2009/04/01	06:00:18	56.7	76.5	58.6	51.1	51.3
7096	2009/04/01	06:00:33	53.2	48.8	50.5	47.9	45.4
7101	2009/04/01	06:00:48	46.3	50.2	50.9	56.3	75.9
7106	2009/04/01	06:01:03	72.7	57.1	52.2	50.6	50.3
7111	2009/04/01	06:01:18	51.8	53.8	65.9	69.6	70.8
7116	2009/04/01	06:01:33	76.3	72.0	61.4	70.9	69.2
7121	2009/04/01	06:01:48	60.5	50.0	50.5	43.7	50.5
7126	2009/04/01	06:02:03	44.9	44.4	47.3	42.6	47.2
7131	2009/04/01	06:02:18	52.5	55.3	78.7	55.2	51.5
7136	2009/04/01	06:02:33	49.1	48.5	54.8	61.7	66.5
7141	2009/04/01	06:02:48	70.7	66.1	56.1	57.7	73.2
7146	2009/04/01	06:03:03	69.1	57.3	72.6	59.7	62.6
7151	2009/04/01	06:03:18	62.7	73.8	76.7	66.4	63.9
7156	2009/04/01	06:03:33	56.7	52.9	50.3	43.9	45.2
7161	2009/04/01	06:03:48	52.1	51.6	46.7	41.9	44.2
7166	2009/04/01	06:04:03	45.6	42.3	40.2	39.0	38.1
7171	2009/04/01	06:04:18	39.2	40.7	45.9	40.5	45.2
7176	2009/04/01	06:04:33	49.4	54.2	66.7	64.3	51.6
7181	2009/04/01	06:04:48	46.4	48.3	49.6	53.7	68.2
7186	2009/04/01	06:05:03	65.4	56.2	57.0	75.4	74.9
7191	2009/04/01	06:05:18	60.0	54.4	53.0	60.4	73.8
7196	2009/04/01	06:05:33	64.2	54.3	55.9	75.4	67.2
7201	2009/04/01	06:05:48	66.9	59.2	70.8	68.6	60.1
7206	2009/04/01	06:06:03	73.4	72.1	57.1	53.6	48.7
7211	2009/04/01	06:06:18	52.6	54.7	54.5	68.1	61.2
7216	2009/04/01	06:06:33	54.6	51.3	44.9	44.5	48.6
7221	2009/04/01	06:06:48	59.7	56.5	61.8	70.8	58.2
7226	2009/04/01	06:07:03	79.9	78.0	76.2	63.4	73.1
7231	2009/04/01	06:07:18	57.9	52.7	43.0	44.1	38.0
7236	2009/04/01	06:07:33	40.6	43.1	46.9	50.2	55.7
7241	2009/04/01	06:07:48	70.5	66.5	64.0	69.4	56.9
7246	2009/04/01	06:08:03	65.9	71.1	70.0	66.2	53.7
7251	2009/04/01	06:08:18	50.6	52.7	44.7	49.5	42.7
7256	2009/04/01	06:08:33	51.9	54.9	62.2	73.2	56.8
7261	2009/04/01	06:08:48	51.8	55.7	56.0	75.9	52.9
7266	2009/04/01	06:09:03	52.6	52.3	59.1	71.8	75.1
7271	2009/04/01	06:09:18	76.1	64.2	58.2	56.7	56.2
7276	2009/04/01	06:09:33	76.2	69.3	60.8	57.2	68.5
7281	2009/04/01	06:09:48	64.6	52.9	52.4	43.9	45.3
7286	2009/04/01	06:10:03	49.2	60.3	70.4	73.1	59.0
7291	2009/04/01	06:10:18	59.1	68.4	74.4	55.5	56.9
7296	2009/04/01	06:10:33	45.8	49.5	46.0	47.2	43.3
7301	2009/04/01	06:10:48	43.0	49.0	56.9	69.1	77.3
7306	2009/04/01	06:11:03	65.5	57.4	62.8	78.9	59.4
7311	2009/04/01	06:11:18	58.5	54.9	59.6	73.0	63.4
7316	2009/04/01	06:11:33	69.4	52.4	51.1	51.4	49.8
7321	2009/04/01	06:11:48	51.4	57.4	69.1	73.2	73.3
7326	2009/04/01	06:12:03	64.6	57.7	52.5	46.7	53.7
7331	2009/04/01	06:12:18	55.5	75.4	54.9	49.3	46.4
7336	2009/04/01	06:12:33	47.5	55.6	68.3	72.4	55.3
7341	2009/04/01	06:12:48	52.9	53.0	39.9	42.4	39.8
7346	2009/04/01	06:13:03	39.7	44.0	47.8	49.9	51.7
7351	2009/04/01	06:13:18	42.7	42.9	39.7	46.0	47.4

7356	2009/04/01	06:13:33	45.0	52.7	56.6	66.5	68.8
7361	2009/04/01	06:13:48	69.8	73.7	56.9	55.9	52.2
7366	2009/04/01	06:14:03	58.7	77.4	78.6	70.4	57.0
7371	2009/04/01	06:14:18	52.3	52.7	52.0	54.0	62.6
7376	2009/04/01	06:14:33	67.2	63.0	76.6	65.3	55.8
7381	2009/04/01	06:14:48	55.0	57.2	79.3	66.2	67.8
7386	2009/04/01	06:15:03	53.2	49.2	50.6	46.7	49.2
7391	2009/04/01	06:15:18	42.9	39.8	41.7	53.2	52.8
7396	2009/04/01	06:15:33	60.6	71.1	55.2	48.4	51.1
7401	2009/04/01	06:15:48	50.4	59.8	70.3	51.3	47.1
7406	2009/04/01	06:16:03	45.1	52.9	56.5	65.4	72.3
7411	2009/04/01	06:16:18	60.7	52.0	53.1	58.4	70.0
7416	2009/04/01	06:16:33	72.6	72.5	63.4	54.9	60.1
7421	2009/04/01	06:16:48	60.0	79.2	59.3	53.5	49.0
7426	2009/04/01	06:17:03	53.2	54.8	60.8	72.3	60.2
7431	2009/04/01	06:17:18	74.0	57.4	54.5	52.5	60.6
7436	2009/04/01	06:17:33	67.0	50.8	46.3	44.9	40.1
7441	2009/04/01	06:17:48	39.2	39.7	37.8	36.7	38.8
7446	2009/04/01	06:18:03	43.5	45.2	55.3	66.6	77.0
7451	2009/04/01	06:18:18	70.1	60.9	71.6	59.5	75.3
7456	2009/04/01	06:18:33	60.9	59.4	54.6	56.2	73.8
7461	2009/04/01	06:18:48	60.8	51.6	49.2	46.5	46.2
7466	2009/04/01	06:19:03	42.2	43.8	48.1	52.7	48.7
7471	2009/04/01	06:19:18	56.0	75.9	61.5	65.4	76.2
7476	2009/04/01	06:19:33	60.0	57.0	63.7	67.4	50.6
7481	2009/04/01	06:19:48	46.1	46.4	41.0	37.5	43.4
7486	2009/04/01	06:20:03	43.1	47.7	51.8	54.4	67.6
7491	2009/04/01	06:20:18	63.8	50.9	47.6	52.4	52.4
7496	2009/04/01	06:20:33	57.4	71.0	77.6	79.1	70.4
7501	2009/04/01	06:20:48	56.9	56.1	50.8	48.0	49.8
7506	2009/04/01	06:21:03	53.6	73.7	66.6	54.7	48.8
7511	2009/04/01	06:21:18	45.0	51.3	54.6	63.4	68.6
7516	2009/04/01	06:21:33	54.0	49.1	43.2	44.3	46.5
7521	2009/04/01	06:21:48	51.7	56.3	58.3	82.7	60.6
7526	2009/04/01	06:22:03	55.1	44.7	44.3	40.1	37.0
7531	2009/04/01	06:22:18	35.7	42.5	37.8	36.5	37.4
7536	2009/04/01	06:22:33	38.1	39.1	41.1	40.0	40.0
7541	2009/04/01	06:22:48	40.3	40.2	42.5	46.6	56.6
7546	2009/04/01	06:23:03	62.3	77.0	58.9	56.9	47.5
7551	2009/04/01	06:23:18	45.1	40.0	35.6	33.4	36.3
7556	2009/04/01	06:23:33	37.5	38.1	43.5	48.0	49.7
7561	2009/04/01	06:23:48	54.6	70.7	56.8	46.6	46.7
7566	2009/04/01	06:24:03	54.0	56.9	60.0	72.8	72.8
7571	2009/04/01	06:24:18	61.7	73.3	57.0	57.6	68.7
7576	2009/04/01	06:24:33	66.7	51.6	47.3	42.6	41.0
7581	2009/04/01	06:24:48	43.6	34.3	38.6	42.1	45.3
7586	2009/04/01	06:25:03	49.9	59.0	74.2	61.3	54.3
7591	2009/04/01	06:25:18	54.2	46.0	50.4	55.5	69.7
7596	2009/04/01	06:25:33	58.1	55.5	59.1	73.1	79.1
7601	2009/04/01	06:25:48	63.1	60.0	49.9	48.5	47.6
7606	2009/04/01	06:26:03	39.1	35.8	34.1	34.3	34.2
7611	2009/04/01	06:26:18	36.0	39.0	37.8	37.5	37.0
7616	2009/04/01	06:26:33	40.8	48.7	55.5	65.1	74.7
7621	2009/04/01	06:26:48	60.0	78.8	68.3	75.7	73.5
7626	2009/04/01	06:27:03	63.8	54.5	55.4	47.2	53.7
7631	2009/04/01	06:27:18	55.3	63.6	81.3	70.7	63.1
7636	2009/04/01	06:27:33	54.9	48.4	54.4	51.4	58.7
7641	2009/04/01	06:27:48	76.1	57.8	51.8	49.1	51.2
7646	2009/04/01	06:28:03	61.2	74.2	72.4	59.8	59.5
7651	2009/04/01	06:28:18	68.4	59.9	70.4	75.5	59.4
7656	2009/04/01	06:28:33	57.2	49.3	48.1	51.9	55.6
7661	2009/04/01	06:28:48	67.7	65.9	52.7	45.5	45.8
7666	2009/04/01	06:29:03	46.7	39.0	35.9	42.5	40.3
7671	2009/04/01	06:29:18	43.1	38.6	44.1	43.2	52.9
7676	2009/04/01	06:29:33	49.5	56.5	77.7	79.3	60.1
7681	2009/04/01	06:29:48	55.6	49.3	47.8	47.6	43.8
7686	2009/04/01	06:30:03	38.8	39.5	44.0	38.9	39.3
7691	2009/04/01	06:30:18	38.0	40.2	39.7	39.8	39.2
7696	2009/04/01	06:30:33	40.0	40.7	40.6	37.8	37.6
7701	2009/04/01	06:30:48	44.4	45.5	56.4	55.4	71.5
7706	2009/04/01	06:31:03	63.4	57.8	57.1	64.2	71.7
7711	2009/04/01	06:31:18	56.5	60.0	73.0	72.1	61.3
7716	2009/04/01	06:31:33	75.0	59.9	50.8	47.3	51.7
7721	2009/04/01	06:31:48	44.0	38.2	38.2	41.6	38.0
7726	2009/04/01	06:32:03	37.2	38.9	37.0	35.6	43.4
7731	2009/04/01	06:32:18	45.1	39.1	39.5	42.6	45.4
7736	2009/04/01	06:32:33	53.0	60.8	74.8	70.6	72.1
7741	2009/04/01	06:32:48	65.1	67.0	69.6	76.1	77.9
7746	2009/04/01	06:33:03	60.1	59.2	51.9	47.0	41.2
7751	2009/04/01	06:33:18	40.0	33.6	36.2	34.5	36.2
7756	2009/04/01	06:33:33	38.9	34.3	36.0	36.2	37.0
7761	2009/04/01	06:33:48	37.3	37.6	36.0	39.6	45.5
7766	2009/04/01	06:34:03	56.1	67.3	77.0	56.9	57.7
7771	2009/04/01	06:34:18	60.1	74.2	61.0	56.3	48.5
7776	2009/04/01	06:34:33	47.6	52.0	58.5	65.7	74.4
7781	2009/04/01	06:34:48	75.7	59.8	58.2	69.3	62.7
7786	2009/04/01	06:35:03	66.4	70.3	59.1	70.1	66.5
7791	2009/04/01	06:35:18	65.7	74.6	75.1	58.5	54.2
7796	2009/04/01	06:35:33	48.8	46.4	42.8	40.9	41.4
7801	2009/04/01	06:35:48	38.3	36.0	40.0	40.8	45.9
7806	2009/04/01	06:36:03	48.7	50.9	54.9	70.9	65.1
7811	2009/04/01	06:36:18	54.9	50.6	50.1	46.1	42.4
7816	2009/04/01	06:36:33	46.6	53.0	56.4	65.8	69.8
7821	2009/04/01	06:36:48	70.2	77.5	73.7	57.1	53.9
7826	2009/04/01	06:37:03	47.5	48.1	43.4	43.9	45.5
7831	2009/04/01	06:37:18	46.9	45.8	53.7	52.4	57.6
7836	2009/04/01	06:37:33	77.6	72.4	59.2	69.3	64.9
7841	2009/04/01	06:37:48	53.7	49.8	46.7	45.6	44.6
7846	2009/04/01	06:38:03	57.8	60.6	69.6	59.4	79.0

7851	2009/04/01	06:38:18	62.1	59.8	67.7	57.2	54.3
7856	2009/04/01	06:38:33	51.5	48.6	46.9	47.3	45.0
7861	2009/04/01	06:38:48	45.6	52.5	57.9	68.8	67.5
7866	2009/04/01	06:39:03	75.2	66.1	56.0	54.4	52.8
7871	2009/04/01	06:39:18	60.8	73.6	54.7	51.3	44.6
7876	2009/04/01	06:39:33	44.8	47.8	41.6	45.0	60.2
7881	2009/04/01	06:39:48	59.1	71.5	60.4	60.0	71.8
7886	2009/04/01	06:40:03	56.6	54.0	52.3	51.6	60.4
7891	2009/04/01	06:40:18	68.4	50.7	46.6	48.2	58.9
7896	2009/04/01	06:40:33	56.8	69.2	71.3	53.5	51.8
7901	2009/04/01	06:40:48	48.9	48.1	46.1	53.1	59.1
7906	2009/04/01	06:41:03	72.9	64.8	62.4	74.6	64.5
7911	2009/04/01	06:41:18	75.8	75.7	64.3	64.0	75.8
7916	2009/04/01	06:41:33	70.7	57.8	55.7	53.5	62.6
7921	2009/04/01	06:41:48	71.7	70.9	76.2	56.4	56.7
7926	2009/04/01	06:42:03	47.6	44.9	47.7	57.9	71.9
7931	2009/04/01	06:42:18	68.1	52.9	58.2	64.4	75.9
7936	2009/04/01	06:42:33	64.9	71.8	52.3	49.6	48.7
7941	2009/04/01	06:42:48	51.8	53.4	56.3	66.5	69.6
7946	2009/04/01	06:43:03	56.5	55.2	67.8	63.8	54.7
7951	2009/04/01	06:43:18	51.7	55.8	58.8	60.8	69.8
7956	2009/04/01	06:43:33	71.7	54.1	53.1	47.8	49.8
7961	2009/04/01	06:43:48	47.6	39.0	43.3	48.0	56.7
7966	2009/04/01	06:44:03	66.3	77.6	76.8	70.9	62.7
7971	2009/04/01	06:44:18	59.8	69.0	59.5	59.5	70.7
7976	2009/04/01	06:44:33	74.7	78.3	73.8	62.7	58.4
7981	2009/04/01	06:44:48	48.8	50.5	54.6	62.3	74.1
7986	2009/04/01	06:45:03	53.7	50.2	47.8	46.4	47.9
7991	2009/04/01	06:45:18	53.3	55.7	72.6	60.5	52.5
7996	2009/04/01	06:45:33	54.6	53.6	58.9	70.5	53.6
8001	2009/04/01	06:45:48	50.1	45.1	49.8	40.4	47.5
8006	2009/04/01	06:46:03	51.7	55.8	78.8	62.9	54.7
8011	2009/04/01	06:46:18	57.1	65.1	78.6	60.5	51.7
8016	2009/04/01	06:46:33	47.1	46.0	45.2	39.1	44.0
8021	2009/04/01	06:46:48	40.7	45.1	39.9	37.7	44.4
8026	2009/04/01	06:47:03	39.2	39.9	37.0	40.8	41.0
8031	2009/04/01	06:47:18	39.3	37.8	33.8	36.6	41.5
8036	2009/04/01	06:47:33	38.4	35.4	36.0	36.6	50.0
8041	2009/04/01	06:47:48	34.3	42.1	35.2	44.9	37.9
8046	2009/04/01	06:48:03	44.6	38.7	38.4	44.7	49.9
8051	2009/04/01	06:48:18	52.0	59.3	70.9	71.2	70.9
8056	2009/04/01	06:48:33	65.1	75.0	59.3	52.2	56.9
8061	2009/04/01	06:48:48	54.8	63.2	74.5	70.6	56.8
8066	2009/04/01	06:49:03	57.5	75.7	61.0	60.4	76.5
8071	2009/04/01	06:49:18	68.1	56.3	50.8	54.7	60.1
8076	2009/04/01	06:49:33	69.2	71.3	72.3	73.4	62.7
8081	2009/04/01	06:49:48	57.7	54.8	60.6	78.6	61.5
8086	2009/04/01	06:50:03	52.4	55.2	61.1	74.5	70.3
8091	2009/04/01	06:50:18	75.2	58.7	56.5	47.8	45.4
8096	2009/04/01	06:50:33	48.4	46.5	38.4	33.8	39.3
8101	2009/04/01	06:50:48	39.3	35.3	41.3	51.8	38.5
8106	2009/04/01	06:51:03	43.6	47.6	43.9	33.7	36.1
8111	2009/04/01	06:51:18	41.3	34.4	42.0	38.6	41.4
8116	2009/04/01	06:51:33	44.1	34.3	37.0	37.2	38.7
8121	2009/04/01	06:51:48	43.7	51.0	59.6	70.0	61.5
8126	2009/04/01	06:52:03	71.2	55.6	52.0	58.2	59.4
8131	2009/04/01	06:52:18	70.8	59.5	61.8	58.5	54.6
8136	2009/04/01	06:52:33	62.9	89.3	74.3	57.3	52.1
8141	2009/04/01	06:52:48	56.3	60.0	72.2	59.2	55.2
8146	2009/04/01	06:53:03	59.3	67.5	50.9	49.0	45.2
8151	2009/04/01	06:53:18	46.4	49.0	40.9	39.0	40.6
8156	2009/04/01	06:53:33	45.7	47.3	52.3	56.0	75.6
8161	2009/04/01	06:53:48	57.1	52.5	51.1	48.5	46.2
8166	2009/04/01	06:54:03	40.8	46.4	53.4	54.8	44.9
8171	2009/04/01	06:54:18	50.8	53.6	57.5	58.2	71.2
8176	2009/04/01	06:54:33	53.4	47.5	43.7	41.4	42.8
8181	2009/04/01	06:54:48	47.4	47.8	45.5	45.0	50.7
8186	2009/04/01	06:55:03	46.3	34.8	41.1	41.9	41.5
8191	2009/04/01	06:55:18	51.7	53.5	52.4	61.2	73.4
8196	2009/04/01	06:55:33	67.5	56.5	51.5	49.1	52.0
8201	2009/04/01	06:55:48	42.6	46.4	51.8	42.1	37.1
8206	2009/04/01	06:56:03	45.3	48.4	59.4	73.9	71.4
8211	2009/04/01	06:56:18	68.7	59.7	51.4	44.7	43.5
8216	2009/04/01	06:56:33	45.0	43.8	48.0	58.3	69.2
8221	2009/04/01	06:56:48	75.1	77.5	67.5	59.1	51.8
8226	2009/04/01	06:57:03	48.0	51.9	49.2	43.8	46.2
8231	2009/04/01	06:57:18	42.9	53.2	54.3	54.5	59.2
8236	2009/04/01	06:57:33	67.3	63.4	54.5	56.0	55.9
8241	2009/04/01	06:57:48	56.3	63.4	70.1	56.8	50.7
8246	2009/04/01	06:58:03	46.0	46.3	45.7	42.1	46.8
8251	2009/04/01	06:58:18	47.7	52.7	57.0	68.6	66.2
8256	2009/04/01	06:58:33	57.6	55.2	50.6	53.8	59.1
8261	2009/04/01	06:58:48	72.1	68.9	77.7	64.9	73.5
8266	2009/04/01	06:59:03	72.4	63.5	68.3	78.2	62.6
8271	2009/04/01	06:59:18	64.3	70.3	72.6	59.2	56.9
8276	2009/04/01	06:59:33	48.6	46.9	48.3	44.4	48.1
8281	2009/04/01	06:59:48	37.5	41.2	49.5	37.0	40.5
8286	2009/04/01	07:00:03	43.2	46.8	47.0	49.9	52.3
8291	2009/04/01	07:00:18	61.4	72.3	54.9	50.9	47.7
8296	2009/04/01	07:00:33	47.5	40.4	42.0	42.8	41.8
8301	2009/04/01	07:00:48	41.7	44.0	46.5	54.5	57.9
8306	2009/04/01	07:01:03	74.1	58.1	50.6	49.1	47.6
8311	2009/04/01	07:01:18	44.4	40.4	45.1	38.3	42.8
8316	2009/04/01	07:01:33	38.1	45.9	41.2	43.3	40.7
8321	2009/04/01	07:01:48	42.7	34.7	45.0	42.5	41.9
8326	2009/04/01	07:02:03	45.9	47.2	52.8	50.8	59.1
8331	2009/04/01	07:02:18	70.9	59.5	58.1	71.7	65.0
8336	2009/04/01	07:02:33	61.1	75.5	66.0	55.8	49.0
8341	2009/04/01	07:02:48	49.2	51.5	52.0	61.7	75.0

8346	2009/04/01	07:03:03	69.5	59.9	66.6	68.7	76.4
8351	2009/04/01	07:03:18	60.7	66.2	66.5	54.9	49.3
8356	2009/04/01	07:03:33	45.5	45.9	46.8	39.4	41.5
8361	2009/04/01	07:03:48	40.6	43.9	49.4	50.8	53.1
8366	2009/04/01	07:04:03	59.8	71.8	54.3	54.6	50.1
8371	2009/04/01	07:04:18	50.8	49.9	50.7	50.3	56.8
8376	2009/04/01	07:04:33	69.7	53.4	47.3	46.6	48.5
8381	2009/04/01	07:04:48	43.7	54.0	53.0	59.5	71.0
8386	2009/04/01	07:05:03	66.6	76.5	59.7	55.2	47.8
8391	2009/04/01	07:05:18	45.6	54.1	53.4	57.6	76.6
8396	2009/04/01	07:05:33	67.5	67.9	55.4	53.3	56.0
8401	2009/04/01	07:05:48	78.0	61.9	53.3	48.2	47.8
8406	2009/04/01	07:06:03	49.2	52.8	53.6	60.1	69.1
8411	2009/04/01	07:06:18	52.6	49.4	45.4	46.3	49.2
8416	2009/04/01	07:06:33	51.0	53.2	65.3	67.4	53.7
8421	2009/04/01	07:06:48	47.5	49.1	43.2	46.7	45.2
8426	2009/04/01	07:07:03	40.0	41.3	43.7	49.8	59.8
8431	2009/04/01	07:07:18	73.0	66.2	55.2	59.5	73.3
8436	2009/04/01	07:07:33	57.6	49.0	47.9	50.9	48.9
8441	2009/04/01	07:07:48	37.2	38.0	42.5	42.1	51.9
8446	2009/04/01	07:08:03	55.3	56.4	68.4	68.7	52.2
8451	2009/04/01	07:08:18	38.9	41.7	49.2	42.9	49.5
8456	2009/04/01	07:08:33	58.2	78.7	63.7	63.1	57.1
8461	2009/04/01	07:08:48	61.0	73.5	61.1	57.5	52.5
8466	2009/04/01	07:09:03	50.3	47.5	44.0	44.7	39.3
8471	2009/04/01	07:09:18	37.3	51.6	42.2	41.5	41.0
8476	2009/04/01	07:09:33	47.3	50.6	59.3	71.0	70.7
8481	2009/04/01	07:09:48	56.0	57.6	46.6	46.5	44.8
8486	2009/04/01	07:10:03	39.7	45.9	46.9	45.8	60.2
8491	2009/04/01	07:10:18	66.7	73.4	56.7	53.9	45.6
8496	2009/04/01	07:10:33	46.8	47.1	48.8	43.5	43.5
8501	2009/04/01	07:10:48	44.4	46.4	43.8	39.8	42.7
8506	2009/04/01	07:11:03	41.0	42.8	40.8	43.1	45.2
8511	2009/04/01	07:11:18	52.0	52.2	61.7	72.9	52.4
8516	2009/04/01	07:11:33	48.1	45.4	49.9	36.2	39.6
8521	2009/04/01	07:11:48	33.8	36.5	36.2	39.9	40.7
8526	2009/04/01	07:12:03	47.0	49.6	52.6	74.6	53.6
8531	2009/04/01	07:12:18	49.1	43.1	42.3	39.6	39.5
8536	2009/04/01	07:12:33	39.2	45.6	41.4	42.1	44.9
8541	2009/04/01	07:12:48	50.7	51.9	56.6	78.7	60.8
8546	2009/04/01	07:13:03	53.2	53.5	59.5	70.7	64.8
8551	2009/04/01	07:13:18	53.1	58.0	53.7	58.5	73.0
8556	2009/04/01	07:13:33	56.3	51.6	48.3	47.5	45.2
8561	2009/04/01	07:13:48	45.3	43.6	43.4	43.3	43.9
8566	2009/04/01	07:14:03	42.7	41.5	42.2	41.7	45.8
8571	2009/04/01	07:14:18	51.1	55.1	65.5	66.3	52.2
8576	2009/04/01	07:14:33	50.6	42.1	47.5	49.9	58.9
8581	2009/04/01	07:14:48	81.3	58.8	57.5	47.4	41.9
8586	2009/04/01	07:15:03	49.5	55.1	58.5	68.2	58.1
8591	2009/04/01	07:15:18	49.5	50.8	41.3	46.2	47.1
8596	2009/04/01	07:15:33	50.6	52.4	68.6	63.9	54.8
8601	2009/04/01	07:15:48	59.2	72.8	59.2	53.8	47.3
8606	2009/04/01	07:16:03	45.8	51.9	58.8	52.2	47.6
8611	2009/04/01	07:16:18	54.3	65.9	54.1	54.0	64.0
8616	2009/04/01	07:16:33	62.6	50.0	47.5	45.1	49.5
8621	2009/04/01	07:16:48	58.9	60.0	68.3	56.2	51.7
8626	2009/04/01	07:17:03	50.5	41.5	41.7	44.9	48.6
8631	2009/04/01	07:17:18	48.1	53.9	73.7	59.4	48.0
8636	2009/04/01	07:17:33	44.9	41.3	43.3	40.6	42.4
8641	2009/04/01	07:17:48	52.2	50.5	59.0	71.9	53.9
8646	2009/04/01	07:18:03	56.8	59.0	72.4	74.1	76.3
8651	2009/04/01	07:18:18	66.3	58.7	52.2	45.1	45.7
8656	2009/04/01	07:18:33	43.0	43.5	41.9	53.1	51.9
8661	2009/04/01	07:18:48	58.5	72.4	55.4	50.5	45.3
8666	2009/04/01	07:19:03	44.7	40.7	39.2	41.3	41.0
8671	2009/04/01	07:19:18	40.2	45.1	50.5	56.5	68.8
8676	2009/04/01	07:19:33	60.8	49.9	50.4	45.6	41.5
8681	2009/04/01	07:19:48	39.9	39.7	38.9	38.5	39.7
8686	2009/04/01	07:20:03	36.2	37.0	37.1	37.8	37.4
8691	2009/04/01	07:20:18	40.2	42.6	45.2	51.4	55.1
8696	2009/04/01	07:20:33	55.2	67.8	73.3	57.1	50.5
8701	2009/04/01	07:20:48	47.1	45.0	44.9	41.2	36.8
8706	2009/04/01	07:21:03	35.7	36.7	36.1	35.1	39.2
8711	2009/04/01	07:21:18	36.9	35.6	36.6	37.7	43.5
8716	2009/04/01	07:21:33	54.4	62.1	72.6	59.2	56.8
8721	2009/04/01	07:21:48	45.7	42.1	42.5	44.0	33.9
8726	2009/04/01	07:22:03	34.6	34.1	33.5	36.4	34.8
8731	2009/04/01	07:22:18	38.0	34.9	33.2	35.8	33.5
8736	2009/04/01	07:22:33	35.7	40.7	42.1	46.6	53.4
8741	2009/04/01	07:22:48	56.6	67.8	66.4	60.1	71.8
8746	2009/04/01	07:23:03	55.4	49.2	44.6	46.2	36.0
8751	2009/04/01	07:23:18	35.0	34.5	34.6	34.7	35.8
8756	2009/04/01	07:23:33	40.1	44.5	53.8	51.0	56.6
8761	2009/04/01	07:23:48	76.6	62.1	50.6	47.8	59.4
8766	2009/04/01	07:24:03	60.2	72.4	61.8	57.2	46.9
8771	2009/04/01	07:24:18	56.0	44.1	44.6	40.4	40.8
8776	2009/04/01	07:24:33	41.1	44.0	46.1	41.7	44.2
8781	2009/04/01	07:24:48	42.9	40.4	39.1	38.9	36.8
8786	2009/04/01	07:25:03	39.4	39.7	41.1	48.2	54.9
8791	2009/04/01	07:25:18	57.3	69.8	71.5	59.9	77.2
8796	2009/04/01	07:25:33	66.5	57.2	59.2	74.9	66.7
8801	2009/04/01	07:25:48	54.2	48.1	46.7	41.8	39.8
8806	2009/04/01	07:26:03	34.0	35.9	34.5	37.0	34.7
8811	2009/04/01	07:26:18	33.3	36.1	37.8	34.5	33.2
8816	2009/04/01	07:26:33	36.8	33.7	35.1	34.4	40.0
8821	2009/04/01	07:26:48	37.2	37.7	41.7	55.8	58.1
8826	2009/04/01	07:27:03	74.8	56.2	54.1	45.8	43.7
8831	2009/04/01	07:27:18	41.7	41.3	47.8	50.8	54.1
8836	2009/04/01	07:27:33	68.0	67.3	54.5	61.3	73.9

8841	2009/04/01	07:27:48	77.6	70.4	61.9	75.3	58.2
8846	2009/04/01	07:28:03	54.1	48.3	45.8	41.1	41.1
8851	2009/04/01	07:28:18	45.1	44.1	41.9	40.2	40.6
8856	2009/04/01	07:28:33	41.4	44.1	50.6	53.1	60.3
8861	2009/04/01	07:28:48	72.1	74.1	60.5	55.6	54.7
8866	2009/04/01	07:29:03	45.5	47.4	43.7	48.3	51.1
8871	2009/04/01	07:29:18	53.5	59.6	69.2	53.7	46.7
8876	2009/04/01	07:29:33	44.2	45.6	53.1	62.4	73.3
8881	2009/04/01	07:29:48	75.6	59.0	58.8	49.8	51.4
8886	2009/04/01	07:30:03	53.7	58.5	59.1	67.2	72.4
8891	2009/04/01	07:30:18	59.1	59.4	80.3	60.3	55.0
8896	2009/04/01	07:30:33	51.0	57.6	62.7	73.6	64.3
8901	2009/04/01	07:30:48	56.1	57.0	59.8	77.9	66.6
8906	2009/04/01	07:31:03	68.4	54.4	49.6	46.4	45.1
8911	2009/04/01	07:31:18	50.7	51.5	58.6	70.9	52.7
8916	2009/04/01	07:31:33	53.7	58.3	64.0	74.3	61.6
8921	2009/04/01	07:31:48	59.1	60.1	72.4	76.1	76.9
8926	2009/04/01	07:32:03	64.3	60.7	52.6	47.0	45.7
8931	2009/04/01	07:32:18	44.1	43.4	38.2	40.7	41.8
8936	2009/04/01	07:32:33	40.9	39.3	41.6	48.4	45.2
8941	2009/04/01	07:32:48	40.9	37.6	37.9	41.2	51.7
8946	2009/04/01	07:33:03	59.0	76.0	65.1	72.2	70.7
8951	2009/04/01	07:33:18	73.9	64.5	57.7	62.7	65.8
8956	2009/04/01	07:33:33	76.7	67.8	61.3	60.8	71.0
8961	2009/04/01	07:33:48	61.5	80.6	58.0	66.7	46.4
8966	2009/04/01	07:34:03	49.6	52.3	39.7	48.4	38.6
8971	2009/04/01	07:34:18	39.8	41.0	47.1	53.2	58.7
8976	2009/04/01	07:34:33	69.9	66.0	53.5	46.8	49.0
8981	2009/04/01	07:34:48	44.7	39.8	38.7	39.8	38.6
8986	2009/04/01	07:35:03	56.9	39.9	57.2	48.5	40.7
8991	2009/04/01	07:35:18	43.0	45.6	52.1	56.3	65.6
8996	2009/04/01	07:35:33	74.9	64.9	58.7	58.5	72.4
9001	2009/04/01	07:35:48	65.9	55.9	57.6	73.5	71.6
9006	2009/04/01	07:36:03	72.4	63.6	74.8	59.6	59.7
9011	2009/04/01	07:36:18	49.9	47.7	39.2	37.1	35.4
9016	2009/04/01	07:36:33	34.7	35.1	35.2	36.3	38.9
9021	2009/04/01	07:36:48	44.0	49.7	62.6	75.3	75.3
9026	2009/04/01	07:37:03	58.8	58.6	68.5	66.2	61.1
9031	2009/04/01	07:37:18	77.4	64.8	58.6	59.6	81.8
9036	2009/04/01	07:37:33	63.0	55.4	51.8	50.4	44.8
9041	2009/04/01	07:37:48	44.2	39.2	40.7	51.5	51.0
9046	2009/04/01	07:38:03	56.2	77.7	65.4	67.1	52.1
9051	2009/04/01	07:38:18	49.6	46.2	45.0	38.8	41.6
9056	2009/04/01	07:38:33	48.9	53.8	53.3	65.7	70.7
9061	2009/04/01	07:38:48	69.2	63.4	53.2	54.4	75.8
9066	2009/04/01	07:39:03	62.6	74.3	71.2	62.5	70.7
9071	2009/04/01	07:39:18	70.5	55.3	56.4	61.3	73.4
9076	2009/04/01	07:39:33	64.6	53.7	55.8	44.8	41.8
9081	2009/04/01	07:39:48	38.9	40.2	42.0	49.4	53.8
9086	2009/04/01	07:40:03	56.5	79.6	76.6	58.3	55.7
9091	2009/04/01	07:40:18	49.2	46.3	41.2	43.9	49.4
9096	2009/04/01	07:40:33	53.7	65.4	64.2	49.1	46.5
9101	2009/04/01	07:40:48	45.6	48.2	40.5	42.8	53.7
9106	2009/04/01	07:41:03	57.5	64.3	76.8	55.8	54.4
9111	2009/04/01	07:41:18	44.8	44.1	43.4	42.1	41.2
9116	2009/04/01	07:41:33	41.5	41.5	41.5	42.3	42.3
9121	2009/04/01	07:41:48	44.5	45.8	52.6	64.2	75.5
9126	2009/04/01	07:42:03	55.8	52.2	47.8	45.4	39.6
9131	2009/04/01	07:42:18	35.8	38.4	48.2	50.4	55.0
9136	2009/04/01	07:42:33	68.9	64.3	51.3	45.1	40.7
9141	2009/04/01	07:42:48	39.3	37.3	38.8	37.5	35.1
9146	2009/04/01	07:43:03	38.3	38.5	40.5	42.1	45.4
9151	2009/04/01	07:43:18	48.6	51.9	58.5	68.2	57.0
9156	2009/04/01	07:43:33	77.1	78.1	59.3	56.6	49.7
9161	2009/04/01	07:43:48	47.3	46.8	42.6	42.6	41.1
9166	2009/04/01	07:44:03	45.2	53.3	58.5	73.2	60.8
9171	2009/04/01	07:44:18	54.8	49.2	46.5	50.3	53.2
9176	2009/04/01	07:44:33	59.3	74.4	74.4	58.2	50.1
9181	2009/04/01	07:44:48	46.3	47.1	46.1	36.2	33.3
9186	2009/04/01	07:45:03	34.6	40.6	43.9	42.1	40.8
9191	2009/04/01	07:45:18	46.6	50.7	60.1	71.1	68.5
9196	2009/04/01	07:45:33	54.9	56.4	46.1	43.6	44.0
9201	2009/04/01	07:45:48	53.4	52.0	58.1	71.3	57.3
9206	2009/04/01	07:46:03	56.3	60.6	73.1	56.8	53.8
9211	2009/04/01	07:46:18	47.0	47.9	43.7	41.9	42.7
9216	2009/04/01	07:46:33	44.5	46.8	52.0	54.9	60.5
9221	2009/04/01	07:46:48	77.6	74.0	65.0	54.1	54.6
9226	2009/04/01	07:47:03	51.9	53.8	60.2	71.8	76.0
9231	2009/04/01	07:47:18	58.5	54.7	46.6	45.6	44.7
9236	2009/04/01	07:47:33	45.2	47.0	52.2	50.2	58.6
9241	2009/04/01	07:47:48	75.5	59.1	53.4	50.0	48.1
9246	2009/04/01	07:48:03	56.5	54.5	59.9	72.0	62.5
9251	2009/04/01	07:48:18	68.7	71.5	57.2	59.1	65.4
9256	2009/04/01	07:48:33	75.6	77.4	76.7	76.7	69.3
9261	2009/04/01	07:48:48	71.1	72.7	55.8	53.8	54.5
9266	2009/04/01	07:49:03	58.6	73.1	67.0	54.4	50.1
9271	2009/04/01	07:49:18	47.4	47.6	41.0	36.7	38.1
9276	2009/04/01	07:49:33	42.4	51.7	51.2	60.3	74.6
9281	2009/04/01	07:49:48	57.2	53.8	46.0	46.2	48.4
9286	2009/04/01	07:50:03	43.4	41.9	46.9	43.8	45.2
9291	2009/04/01	07:50:18	40.9	41.4	45.9	50.3	55.7
9296	2009/04/01	07:50:33	57.5	72.3	65.2	68.7	64.2
9301	2009/04/01	07:50:48	53.4	52.0	49.6	47.6	42.2
9306	2009/04/01	07:51:03	42.5	47.0	43.0	45.6	45.5
9311	2009/04/01	07:51:18	44.1	43.8	45.0	48.8	49.3
9316	2009/04/01	07:51:33	54.0	55.6	60.6	73.7	56.1
9321	2009/04/01	07:51:48	55.3	62.2	76.8	66.9	57.9
9326	2009/04/01	07:52:03	50.9	49.5	47.4	49.5	59.3
9331	2009/04/01	07:52:18	74.5	68.3	57.3	61.2	75.3

9336	2009/04/01	07:52:33	55.7	49.0	47.6	48.9	51.6
9341	2009/04/01	07:52:48	56.2	77.4	56.9	52.5	47.4
9346	2009/04/01	07:53:03	49.5	43.7	42.5	43.1	44.7
9351	2009/04/01	07:53:18	42.4	41.7	42.1	39.2	42.3
9356	2009/04/01	07:53:33	42.1	41.8	41.6	43.5	42.9
9361	2009/04/01	07:53:48	44.1	41.8	43.8	45.2	52.3
9366	2009/04/01	07:54:03	51.2	61.7	73.6	58.0	51.5
9371	2009/04/01	07:54:18	47.7	49.4	43.6	42.9	42.8
9376	2009/04/01	07:54:33	43.1	42.7	45.4	41.5	43.5
9381	2009/04/01	07:54:48	42.8	46.0	49.2	48.8	50.7
9386	2009/04/01	07:55:03	61.7	66.3	52.5	48.2	47.5
9391	2009/04/01	07:55:18	44.6	43.5	47.5	42.7	45.0
9396	2009/04/01	07:55:33	46.4	42.9	45.0	42.7	43.1
9401	2009/04/01	07:55:48	46.5	42.3	42.1	44.0	45.2
9406	2009/04/01	07:56:03	47.5	51.2	50.3	56.8	73.8
9411	2009/04/01	07:56:18	70.7	54.2	56.5	56.3	72.1
9416	2009/04/01	07:56:33	74.5	57.2	51.8	47.8	48.0
9421	2009/04/01	07:56:48	45.5	43.3	42.7	42.5	42.8
9426	2009/04/01	07:57:03	42.3	42.0	41.6	41.6	43.5
9431	2009/04/01	07:57:18	46.0	39.9	41.1	41.6	40.6
9436	2009/04/01	07:57:33	42.5	41.1	41.9	45.8	44.4
9441	2009/04/01	07:57:48	46.3	44.7	45.6	46.0	44.6
9446	2009/04/01	07:58:03	44.4	43.7	43.9	44.2	45.0
9451	2009/04/01	07:58:18	46.1	45.6	50.9	52.0	54.4
9456	2009/04/01	07:58:33	73.7	64.8	52.0	48.8	50.3
9461	2009/04/01	07:58:48	45.3	45.8	47.9	52.6	61.1
9466	2009/04/01	07:59:03	71.1	76.4	57.2	58.8	48.4
9471	2009/04/01	07:59:18	45.9	54.4	52.5	58.6	76.2
9476	2009/04/01	07:59:33	58.0	53.7	48.0	47.4	41.3
9481	2009/04/01	07:59:48	39.0	39.5	39.4	39.7	42.3
9486	2009/04/01	08:00:03	41.1	43.5	48.4	53.2	59.1
9491	2009/04/01	08:00:18	69.0	58.4	49.0	50.3	47.0
9496	2009/04/01	08:00:33	46.1	45.6	46.3	50.3	50.4
9501	2009/04/01	08:00:48	51.7	64.6	65.1	51.1	48.9
9506	2009/04/01	08:01:03	46.5	51.6	46.4	45.9	48.8
9511	2009/04/01	08:01:18	48.5	55.9	69.0	60.3	50.9
9516	2009/04/01	08:01:33	50.5	46.9	46.5	44.8	42.2
9521	2009/04/01	08:01:48	42.8	43.5	45.1	54.4	52.3
9526	2009/04/01	08:02:03	57.8	75.9	57.0	51.2	49.0
9531	2009/04/01	08:02:18	49.4	47.8	47.6	47.7	46.8
9536	2009/04/01	08:02:33	45.9	46.7	52.6	51.8	53.3
9541	2009/04/01	08:02:48	65.1	69.1	62.7	67.0	55.8
9546	2009/04/01	08:03:03	52.0	51.5	49.1	52.6	53.2
9551	2009/04/01	08:03:18	66.7	63.0	55.0	55.0	56.5
9556	2009/04/01	08:03:33	74.9	59.2	55.1	52.1	56.5
9561	2009/04/01	08:03:48	61.1	66.6	67.6	71.5	66.4
9566	2009/04/01	08:04:03	60.8	71.9	68.1	57.2	55.5
9571	2009/04/01	08:04:18	55.5	77.7	60.8	50.6	47.1
9576	2009/04/01	08:04:33	46.9	45.9	44.0	45.4	46.0
9581	2009/04/01	08:04:48	45.3	47.0	50.6	60.4	65.3
9586	2009/04/01	08:05:03	55.1	50.9	52.1	53.1	64.0
9591	2009/04/01	08:05:18	74.3	60.6	58.0	78.5	66.3
9596	2009/04/01	08:05:33	56.6	51.1	48.8	51.7	53.2
9601	2009/04/01	08:05:48	56.8	76.6	57.7	52.8	49.4
9606	2009/04/01	08:06:03	51.5	45.0	44.4	44.9	46.5
9611	2009/04/01	08:06:18	46.2	46.1	48.0	46.2	47.2
9616	2009/04/01	08:06:33	47.0	47.6	46.6	46.3	45.9
9621	2009/04/01	08:06:48	46.5	48.2	48.1	49.2	53.5
9626	2009/04/01	08:07:03	55.7	62.2	80.8	63.4	55.0
9631	2009/04/01	08:07:18	49.4	53.9	56.2	63.8	76.9
9636	2009/04/01	08:07:33	67.1	75.3	61.5	53.4	50.4
9641	2009/04/01	08:07:48	48.0	49.6	45.0	46.5	47.1
9646	2009/04/01	08:08:03	47.5	48.5	53.9	56.4	59.4
9651	2009/04/01	08:08:18	79.2	62.5	56.0	51.8	50.1
9656	2009/04/01	08:08:33	49.3	47.5	50.4	52.2	62.2
9661	2009/04/01	08:08:48	64.7	80.6	66.0	59.8	55.3
9666	2009/04/01	08:09:03	55.0	49.3	47.4	47.4	46.7
9671	2009/04/01	08:09:18	47.4	49.8	46.3	50.4	48.0
9676	2009/04/01	08:09:33	49.0	48.6	48.0	47.4	48.7
9681	2009/04/01	08:09:48	50.2	53.7	55.0	61.2	76.6
9686	2009/04/01	08:10:03	69.9	57.9	51.9	52.8	53.0
9691	2009/04/01	08:10:18	46.7	47.3	47.7	49.1	46.8
9696	2009/04/01	08:10:33	49.2	46.4	49.8	47.2	48.0
9701	2009/04/01	08:10:48	49.7	51.5	56.1	67.6	63.9
9706	2009/04/01	08:11:03	52.9	53.7	54.3	60.2	70.1
9711	2009/04/01	08:11:18	54.4	52.4	49.7	49.2	48.7
9716	2009/04/01	08:11:33	46.7	46.9	46.9	47.3	47.5
9721	2009/04/01	08:11:48	46.8	46.6	46.7	47.9	46.2
9726	2009/04/01	08:12:03	46.3	47.7	46.4	48.0	52.1
9731	2009/04/01	08:12:18	49.4	57.3	70.9	55.0	52.3
9736	2009/04/01	08:12:33	49.9	54.5	55.7	68.2	71.3
9741	2009/04/01	08:12:48	55.9	50.9	50.9	48.9	48.9
9746	2009/04/01	08:13:03	49.1	45.9	46.5	45.9	47.2
9751	2009/04/01	08:13:18	46.6	46.0	46.8	46.5	46.8
9756	2009/04/01	08:13:33	49.2	53.7	53.5	60.7	77.7
9761	2009/04/01	08:13:48	61.8	56.6	52.0	51.0	49.9
9766	2009/04/01	08:14:03	48.0	47.1	47.1	48.9	48.1
9771	2009/04/01	08:14:18	47.2	47.3	47.2	51.1	57.7
9776	2009/04/01	08:14:33	60.8	76.8	66.1	60.3	73.0
9781	2009/04/01	08:14:48	69.4	57.4	55.0	50.7	49.8
9786	2009/04/01	08:15:03	49.8	47.6	48.5	49.1	49.2
9791	2009/04/01	08:15:18	49.4	54.3	55.7	77.0	57.6
9796	2009/04/01	08:15:33	55.8	60.1	69.9	76.5	59.0
9801	2009/04/01	08:15:48	57.6	50.8	49.4	49.4	47.3
9806	2009/04/01	08:16:03	48.6	49.7	53.1	54.9	54.4
9811	2009/04/01	08:16:18	67.3	75.3	61.2	56.7	62.0
9816	2009/04/01	08:16:33	69.4	55.3	52.8	48.1	50.0
9821	2009/04/01	08:16:48	47.5	46.6	46.8	46.4	47.1
9826	2009/04/01	08:17:03	47.7	48.6	47.6	47.2	47.4

9831	2009/04/01	08:17:18	48.0	47.7	48.8	48.7	49.4
9836	2009/04/01	08:17:33	55.1	54.0	60.3	74.0	58.0
9841	2009/04/01	08:17:48	52.7	51.0	51.2	48.1	50.5
9846	2009/04/01	08:18:03	53.3	59.0	72.2	76.4	59.1
9851	2009/04/01	08:18:18	62.9	74.7	72.8	59.9	54.0
9856	2009/04/01	08:18:33	52.7	51.3	48.0	48.3	48.8
9861	2009/04/01	08:18:48	47.1	50.4	47.0	45.7	47.5
9866	2009/04/01	08:19:03	48.1	47.1	46.8	47.4	48.7
9871	2009/04/01	08:19:18	51.8	53.3	60.7	71.3	74.5
9876	2009/04/01	08:19:33	62.6	52.9	52.5	50.4	50.7
9881	2009/04/01	08:19:48	48.3	49.7	49.7	53.5	72.4
9886	2009/04/01	08:20:03	60.9	52.2	52.2	56.5	64.3
9891	2009/04/01	08:20:18	74.6	58.6	57.4	59.3	78.1
9896	2009/04/01	08:20:33	60.6	68.9	67.0	55.8	56.4
9901	2009/04/01	08:20:48	55.5	68.3	67.0	64.1	71.5
9906	2009/04/01	08:21:03	58.1	58.1	71.3	59.0	53.7
9911	2009/04/01	08:21:18	56.6	69.1	69.8	54.5	54.9
9916	2009/04/01	08:21:33	48.4	49.1	54.4	54.2	62.6
9921	2009/04/01	08:21:48	74.0	57.8	52.6	55.4	71.2
9926	2009/04/01	08:22:03	62.1	74.0	63.3	56.3	54.3
9931	2009/04/01	08:22:18	50.7	48.8	48.9	49.5	47.4
9936	2009/04/01	08:22:33	48.9	47.5	46.8	48.0	47.1
9941	2009/04/01	08:22:48	47.8	47.7	47.8	49.5	47.7
9946	2009/04/01	08:23:03	48.9	48.2	48.3	48.2	52.2
9951	2009/04/01	08:23:18	52.9	54.1	67.5	67.7	53.6
9956	2009/04/01	08:23:33	51.6	49.1	50.0	48.7	47.8
9961	2009/04/01	08:23:48	48.9	47.5	48.8	47.7	48.0
9966	2009/04/01	08:24:03	48.1	48.5	48.9	50.1	55.1
9971	2009/04/01	08:24:18	66.2	66.1	57.2	57.6	72.2
9976	2009/04/01	08:24:33	63.2	54.0	54.8	55.6	60.4
9981	2009/04/01	08:24:48	71.7	55.6	53.2	48.6	52.0
9986	2009/04/01	08:25:03	47.8	48.3	47.7	49.2	47.0
9991	2009/04/01	08:25:18	48.0	47.6	47.3	46.3	48.2
9996	2009/04/01	08:25:33	48.4	47.7	48.1	48.7	49.8
10001	2009/04/01	08:25:48	48.9	48.5	53.7	61.9	75.2
10006	2009/04/01	08:26:03	65.7	58.5	65.5	75.9	60.7
10011	2009/04/01	08:26:18	59.0	51.2	52.4	49.4	47.9
10016	2009/04/01	08:26:33	52.9	49.8	53.1	66.4	64.5
10021	2009/04/01	08:26:48	52.5	52.5	58.2	60.0	71.5
10026	2009/04/01	08:27:03	59.0	52.5	52.8	50.4	51.8
10031	2009/04/01	08:27:18	54.6	71.5	66.0	55.2	51.9
10036	2009/04/01	08:27:33	49.0	49.1	46.4	47.3	47.1
10041	2009/04/01	08:27:48	47.5	47.6	52.4	51.7	56.9
10046	2009/04/01	08:28:03	70.1	55.6	51.5	52.0	59.0
10051	2009/04/01	08:28:18	64.7	71.0	58.3	55.2	55.3
10056	2009/04/01	08:28:33	56.3	76.1	62.2	69.3	61.9
10061	2009/04/01	08:28:48	59.5	72.8	71.7	56.0	53.2
10066	2009/04/01	08:29:03	50.0	50.9	48.8	49.6	52.3
10071	2009/04/01	08:29:18	53.0	56.8	69.6	54.8	52.6
10076	2009/04/01	08:29:33	52.2	50.2	49.3	48.1	50.7
10081	2009/04/01	08:29:48	47.1	48.3	48.3	48.2	49.0
10086	2009/04/01	08:30:03	49.4	50.3	60.1	66.9	79.9
10091	2009/04/01	08:30:18	58.5	56.4	51.9	59.4	61.5
10096	2009/04/01	08:30:33	74.5	61.7	59.7	55.1	49.7
10101	2009/04/01	08:30:48	48.4	49.0	47.7	46.5	47.5
10106	2009/04/01	08:31:03	48.4	48.3	54.6	60.9	71.8
10111	2009/04/01	08:31:18	60.2	61.3	70.6	74.7	59.0
10116	2009/04/01	08:31:33	58.1	51.3	48.8	48.5	49.9
10121	2009/04/01	08:31:48	51.7	52.9	67.3	61.7	51.1
10126	2009/04/01	08:32:03	48.6	48.4	49.0	47.4	46.5
10131	2009/04/01	08:32:18	48.4	50.3	51.3	52.6	72.7
10136	2009/04/01	08:32:33	62.6	51.6	48.3	47.8	48.5
10141	2009/04/01	08:32:48	48.4	52.7	55.8	66.5	71.1
10146	2009/04/01	08:33:03	57.5	52.9	55.7	48.3	49.1
10151	2009/04/01	08:33:18	48.9	47.6	47.6	48.0	47.9
10156	2009/04/01	08:33:33	47.2	46.6	46.6	46.9	47.1
10161	2009/04/01	08:33:48	46.3	46.5	47.0	46.7	46.3
10166	2009/04/01	08:34:03	48.0	47.1	47.0	47.0	46.4
10171	2009/04/01	08:34:18	47.8	47.2	47.5	47.6	47.3
10176	2009/04/01	08:34:33	50.6	51.1	58.5	71.0	61.0
10181	2009/04/01	08:34:48	71.8	54.8	53.7	49.2	50.3
10186	2009/04/01	08:35:03	47.9	47.2	46.8	46.6	47.5
10191	2009/04/01	08:35:18	46.5	48.8	47.0	47.6	47.0
10196	2009/04/01	08:35:33	47.8	47.7	48.1	47.9	47.8
10201	2009/04/01	08:35:48	47.8	49.1	47.6	47.2	49.3
10206	2009/04/01	08:36:03	53.8	59.7	68.5	57.5	53.4
10211	2009/04/01	08:36:18	52.6	47.0	48.0	47.9	46.9
10216	2009/04/01	08:36:33	46.3	46.5	47.5	45.8	46.7
10221	2009/04/01	08:36:48	45.9	45.5	46.8	46.7	47.5
10226	2009/04/01	08:37:03	46.4	46.8	46.6	46.4	46.1
10231	2009/04/01	08:37:18	46.3	46.0	47.0	46.1	47.8
10236	2009/04/01	08:37:33	47.9	47.9	48.0	46.7	46.9
10241	2009/04/01	08:37:48	46.7	47.3	47.2	47.6	47.5
10246	2009/04/01	08:38:03	47.9	48.5	48.3	51.5	55.5
10251	2009/04/01	08:38:18	64.8	77.6	59.8	51.8	51.2
10256	2009/04/01	08:38:33	47.3	46.7	47.4	47.4	49.5
10261	2009/04/01	08:38:48	55.9	59.4	73.4	60.8	56.3
10266	2009/04/01	08:39:03	50.5	49.0	47.7	47.8	48.2
10271	2009/04/01	08:39:18	46.5	48.2	46.0	47.5	46.9
10276	2009/04/01	08:39:33	47.1	47.3	48.2	47.8	47.3
10281	2009/04/01	08:39:48	47.2	46.3	47.8	46.3	47.1
10286	2009/04/01	08:40:03	49.3	58.2	57.9	71.3	65.6
10291	2009/04/01	08:40:18	54.7	53.8	49.8	48.8	47.1
10296	2009/04/01	08:40:33	48.4	48.2	48.3	51.6	65.1
10301	2009/04/01	08:40:48	78.4	73.3	68.7	58.5	61.8
10306	2009/04/01	08:41:03	69.4	55.8	51.8	47.4	48.7
10311	2009/04/01	08:41:18	47.1	47.4	49.1	46.5	47.9
10316	2009/04/01	08:41:33	48.3	46.2	48.7	47.0	47.9
10321	2009/04/01	08:41:48	49.0	51.1	50.3	48.3	49.4

10326	2009/04/01	08:42:03	49.4	48.5	47.6	47.5	47.6
10331	2009/04/01	08:42:18	47.3	48.8	55.4	54.7	65.5
10336	2009/04/01	08:42:33	70.3	56.8	51.2	48.9	47.9
10341	2009/04/01	08:42:48	47.2	47.3	47.9	46.5	47.0
10346	2009/04/01	08:43:03	46.1	47.2	46.6	47.3	45.8
10351	2009/04/01	08:43:18	47.3	47.2	46.5	47.4	46.3
10356	2009/04/01	08:43:33	46.4	48.2	46.8	47.5	53.9
10361	2009/04/01	08:43:48	51.1	59.3	72.2	56.0	53.5
10366	2009/04/01	08:44:03	49.1	47.3	48.8	47.3	46.3
10371	2009/04/01	08:44:18	47.3	46.8	47.7	47.7	47.9
10376	2009/04/01	08:44:33	47.5	47.5	47.2	47.5	47.5
10381	2009/04/01	08:44:48	47.4	46.6	47.1	47.5	46.6
10386	2009/04/01	08:45:03	47.8	47.2	48.3	50.3	60.9
10391	2009/04/01	08:45:18	61.6	73.5	62.0	73.6	63.5
10396	2009/04/01	08:45:33	52.2	49.8	49.3	47.5	46.5
10401	2009/04/01	08:45:48	46.0	47.0	46.7	46.4	48.0
10406	2009/04/01	08:46:03	51.6	52.2	56.5	63.4	70.5
10411	2009/04/01	08:46:18	55.4	51.9	50.5	52.0	50.5
10416	2009/04/01	08:46:33	50.9	53.0	59.7	67.6	51.9
10421	2009/04/01	08:46:48	51.0	51.9	53.6	57.2	70.2
10426	2009/04/01	08:47:03	69.8	63.9	61.2	59.9	62.0
10431	2009/04/01	08:47:18	69.0	67.7	68.4	62.0	56.3
10436	2009/04/01	08:47:33	51.4	48.8	48.6	46.0	45.5
10441	2009/04/01	08:47:48	47.0	46.3	45.8	47.3	45.3
10446	2009/04/01	08:48:03	47.3	46.6	46.7	47.2	49.0
10451	2009/04/01	08:48:18	56.8	62.1	72.9	70.5	55.8
10456	2009/04/01	08:48:33	53.6	49.8	48.4	47.9	47.8
10461	2009/04/01	08:48:48	47.9	46.8	47.0	47.0	46.6
10466	2009/04/01	08:49:03	46.9	46.2	54.9	55.2	70.4
10471	2009/04/01	08:49:18	64.2	54.0	55.0	53.3	65.7
10476	2009/04/01	08:49:33	64.8	53.1	51.5	48.9	49.3
10481	2009/04/01	08:49:48	47.5	46.2	46.3	48.0	46.8
10486	2009/04/01	08:50:03	48.7	46.5	47.5	49.8	57.2
10491	2009/04/01	08:50:18	63.8	68.5	59.1	55.3	54.7
10496	2009/04/01	08:50:33	48.2	46.4	47.4	46.4	47.2
10501	2009/04/01	08:50:48	46.0	46.0	46.2	46.4	45.3
10506	2009/04/01	08:51:03	47.1	46.4	45.4	45.5	46.3
10511	2009/04/01	08:51:18	44.8	46.1	46.1	48.3	53.8
10516	2009/04/01	08:51:33	59.8	68.7	75.0	72.0	58.6
10521	2009/04/01	08:51:48	55.4	49.8	50.8	58.5	62.9
10526	2009/04/01	08:52:03	75.5	60.4	59.6	70.8	56.9
10531	2009/04/01	08:52:18	51.9	49.6	52.3	47.1	47.0
10536	2009/04/01	08:52:33	46.8	47.0	48.0	46.4	48.2
10541	2009/04/01	08:52:48	47.3	46.1	45.5	46.6	46.9
10546	2009/04/01	08:53:03	46.0	46.9	46.9	47.2	49.2
10551	2009/04/01	08:53:18	57.7	64.5	77.3	57.1	54.3
10556	2009/04/01	08:53:33	47.6	46.6	47.1	46.8	45.7
10561	2009/04/01	08:53:48	47.1	45.1	46.3	45.2	46.3
10566	2009/04/01	08:54:03	46.5	46.2	45.2	45.1	46.9
10571	2009/04/01	08:54:18	46.9	48.4	54.8	54.1	59.9
10576	2009/04/01	08:54:33	70.9	54.3	53.5	48.8	51.0
10581	2009/04/01	08:54:48	49.9	50.6	58.6	74.0	57.5
10586	2009/04/01	08:55:03	51.9	49.6	47.2	49.1	45.5
10591	2009/04/01	08:55:18	47.4	51.3	50.4	57.3	71.5
10596	2009/04/01	08:55:33	57.5	60.7	72.4	75.8	59.3
10601	2009/04/01	08:55:48	55.5	55.8	54.8	62.9	73.4
10606	2009/04/01	08:56:03	74.3	63.6	59.3	53.1	49.1
10611	2009/04/01	08:56:18	46.7	45.9	45.2	46.5	45.5
10616	2009/04/01	08:56:33	46.1	46.0	47.1	51.2	59.6
10621	2009/04/01	08:56:48	68.9	76.6	69.4	59.0	51.5
10626	2009/04/01	08:57:03	50.0	47.2	47.2	46.8	46.2
10631	2009/04/01	08:57:18	46.1	44.7	44.5	45.0	45.0
10636	2009/04/01	08:57:33	44.5	45.4	46.4	47.0	46.1
10641	2009/04/01	08:57:48	49.0	51.4	54.1	76.8	60.6
10646	2009/04/01	08:58:03	50.5	50.0	44.8	45.8	44.8
10651	2009/04/01	08:58:18	44.2	42.0	43.8	44.4	43.5
10656	2009/04/01	08:58:33	43.0	44.2	45.0	43.8	43.2
10661	2009/04/01	08:58:48	44.1	43.3	44.6	43.0	43.2
10666	2009/04/01	08:59:03	44.0	44.0	43.8	43.3	44.6
10671	2009/04/01	08:59:18	44.7	44.0	44.4	42.7	45.0
10676	2009/04/01	08:59:33	45.9	42.8	47.9	54.6	59.4
10681	2009/04/01	08:59:48	70.0	67.4	57.1	52.9	49.9
10686	2009/04/01	09:00:03	46.9	45.8	43.0	43.2	44.6
10691	2009/04/01	09:00:18	44.2	44.2	44.7	45.0	46.1
10696	2009/04/01	09:00:33	46.1	46.7	43.0	42.4	42.3
10701	2009/04/01	09:00:48	42.4	43.7	45.0	42.8	43.4
10706	2009/04/01	09:01:03	44.4	45.8	56.0	52.4	60.5
10711	2009/04/01	09:01:18	72.1	54.3	53.1	46.8	47.5
10716	2009/04/01	09:01:33	45.5	44.1	43.8	44.1	42.9
10721	2009/04/01	09:01:48	44.1	44.3	44.8	44.5	43.5
10726	2009/04/01	09:02:03	43.1	46.0	45.5	51.8	56.4
10731	2009/04/01	09:02:18	67.4	72.0	64.2	53.7	53.4
10736	2009/04/01	09:02:33	58.2	73.8	69.4	56.4	53.5
10741	2009/04/01	09:02:48	50.2	49.6	50.2	38.0	35.7
10746	2009/04/01	09:03:03	36.6	37.2	33.1	33.2	36.6
10751	2009/04/01	09:03:18	36.4	35.5	35.5	35.2	38.3
10756	2009/04/01	09:03:33	38.6	41.2	42.8	49.4	59.7
10761	2009/04/01	09:03:48	70.2	72.0	56.0	55.4	47.8
10766	2009/04/01	09:04:03	45.1	45.6	44.9	44.0	44.5
10771	2009/04/01	09:04:18	43.4	43.8	45.1	44.0	45.5
10776	2009/04/01	09:04:33	44.6	45.7	46.2	49.3	48.3
10781	2009/04/01	09:04:48	53.7	63.9	65.2	52.9	48.8
10786	2009/04/01	09:05:03	46.6	45.4	44.6	42.3	42.4
10791	2009/04/01	09:05:18	43.6	43.3	45.0	44.6	43.7
10796	2009/04/01	09:05:33	43.9	43.7	45.5	43.9	45.8
10801	2009/04/01	09:05:48	51.0	50.0	54.8	68.4	66.9
10806	2009/04/01	09:06:03	54.0	51.6	49.5	49.5	45.8
10811	2009/04/01	09:06:18	45.5	46.5	45.0	45.4	44.8
10816	2009/04/01	09:06:33	45.2	45.7	46.7	50.8	51.9

10821	2009/04/01	09:06:48	55.8	75.2	60.9	67.8	55.5
10826	2009/04/01	09:07:03	52.1	47.8	46.9	48.7	52.7
10831	2009/04/01	09:07:18	58.3	72.9	63.1	53.8	56.5
10836	2009/04/01	09:07:33	53.1	54.8	69.9	63.3	53.3
10841	2009/04/01	09:07:48	49.6	47.6	48.8	46.1	45.0
10846	2009/04/01	09:08:03	44.4	46.0	44.5	44.1	44.2
10851	2009/04/01	09:08:18	44.7	44.0	46.5	44.4	43.1
10856	2009/04/01	09:08:33	45.5	45.1	45.1	44.9	46.6
10861	2009/04/01	09:08:48	49.0	48.9	52.8	65.2	67.3
10866	2009/04/01	09:09:03	51.1	50.9	54.2	56.6	71.5
10871	2009/04/01	09:09:18	64.6	53.7	50.2	49.6	48.2
10876	2009/04/01	09:09:33	45.1	44.9	42.7	38.9	38.1
10881	2009/04/01	09:09:48	37.5	38.8	40.1	48.1	52.4
10886	2009/04/01	09:10:03	64.8	71.0	53.6	48.9	50.1
10891	2009/04/01	09:10:18	38.7	42.3	35.9	36.4	43.0
10896	2009/04/01	09:10:33	41.0	34.5	33.9	34.4	35.3
10901	2009/04/01	09:10:48	37.7	42.2	40.1	40.2	37.8
10906	2009/04/01	09:11:03	39.0	43.9	48.6	50.7	55.4
10911	2009/04/01	09:11:18	68.5	55.0	48.4	44.6	51.3
10916	2009/04/01	09:11:33	42.6	41.6	41.9	45.1	49.3
10921	2009/04/01	09:11:48	54.1	64.5	67.9	56.2	52.5
10926	2009/04/01	09:12:03	54.2	45.7	45.3	44.0	44.7
10931	2009/04/01	09:12:18	45.0	46.0	44.9	45.5	47.3
10936	2009/04/01	09:12:33	48.8	56.6	57.7	78.3	62.5
10941	2009/04/01	09:12:48	71.7	56.1	54.1	58.2	60.2
10946	2009/04/01	09:13:03	72.7	69.1	74.8	62.8	55.1
10951	2009/04/01	09:13:18	53.4	52.7	59.1	72.0	56.8
10956	2009/04/01	09:13:33	52.8	45.1	42.2	43.4	35.7
10961	2009/04/01	09:13:48	35.8	35.8	36.5	40.5	52.5
10966	2009/04/01	09:14:03	47.8	53.6	56.8	66.4	55.0
10971	2009/04/01	09:14:18	51.1	49.2	46.2	47.3	45.6
10976	2009/04/01	09:14:33	45.1	43.7	44.4	46.4	44.4
10981	2009/04/01	09:14:48	44.3	43.3	44.4	45.9	43.8
10986	2009/04/01	09:15:03	44.0	43.9	43.3	44.4	43.8
10991	2009/04/01	09:15:18	45.4	45.3	43.8	43.9	41.1
10996	2009/04/01	09:15:33	41.4	42.6	42.3	45.6	56.0
11001	2009/04/01	09:15:48	63.0	73.6	79.9	68.5	60.3
11006	2009/04/01	09:16:03	53.1	50.9	53.4	60.0	71.8
11011	2009/04/01	09:16:18	56.0	48.2	45.2	47.6	39.4
11016	2009/04/01	09:16:33	39.6	39.6	38.7	37.1	38.8
11021	2009/04/01	09:16:48	39.2	40.2	38.7	39.5	40.1
11026	2009/04/01	09:17:03	41.1	38.9	41.3	43.0	42.6
11031	2009/04/01	09:17:18	42.1	42.4	41.5	42.0	43.7
11036	2009/04/01	09:17:33	42.4	41.6	42.1	43.3	42.8
11041	2009/04/01	09:17:48	42.8	44.0	44.3	44.4	43.3
11046	2009/04/01	09:18:03	44.9	45.4	52.2	52.7	62.8
11051	2009/04/01	09:18:18	75.1	59.7	54.3	52.6	58.8
11056	2009/04/01	09:18:33	74.9	71.9	68.8	54.7	50.2
11061	2009/04/01	09:18:48	49.5	50.7	48.0	44.3	42.7
11066	2009/04/01	09:19:03	44.7	43.9	43.4	44.0	43.2
11071	2009/04/01	09:19:18	43.7	43.7	43.3	43.5	43.8
11076	2009/04/01	09:19:33	42.7	44.6	45.9	44.5	45.7
11081	2009/04/01	09:19:48	44.8	45.4	45.1	43.5	43.5
11086	2009/04/01	09:20:03	42.3	42.9	43.5	43.4	43.4
11091	2009/04/01	09:20:18	43.0	43.3	42.4	42.9	43.2
11096	2009/04/01	09:20:33	42.9	41.7	42.8	44.1	42.4
11101	2009/04/01	09:20:48	43.0	43.0	44.8	45.2	44.1
11106	2009/04/01	09:21:03	45.9	43.6	44.9	41.6	43.2
11111	2009/04/01	09:21:18	42.8	42.5	44.6	44.0	44.4
11116	2009/04/01	09:21:33	43.4	47.7	51.9	52.5	60.1
11121	2009/04/01	09:21:48	73.2	59.4	52.1	51.1	51.4
11126	2009/04/01	09:22:03	44.0	42.8	42.9	42.7	42.7
11131	2009/04/01	09:22:18	43.9	42.9	42.8	43.5	42.7
11136	2009/04/01	09:22:33	44.0	43.7	41.6	42.1	42.7
11141	2009/04/01	09:22:48	43.2	41.7	43.5	45.8	56.9
11146	2009/04/01	09:23:03	57.5	71.4	59.4	58.3	52.8
11151	2009/04/01	09:23:18	43.9	40.3	41.9	37.0	36.6
11156	2009/04/01	09:23:33	36.0	36.2	34.9	35.6	38.1
11161	2009/04/01	09:23:48	39.3	38.1	37.7	36.6	36.5
11166	2009/04/01	09:24:03	37.2	37.3	39.1	41.1	41.4
11171	2009/04/01	09:24:18	43.0	46.1	44.9	49.7	59.4
11176	2009/04/01	09:24:33	64.2	75.3	57.4	56.2	47.6
11181	2009/04/01	09:24:48	47.0	49.3	62.3	72.4	73.6
11186	2009/04/01	09:25:03	58.6	59.8	50.9	48.1	54.5
11191	2009/04/01	09:25:18	56.9	70.0	62.7	55.8	54.2
11196	2009/04/01	09:25:33	58.4	72.2	56.6	53.7	48.4
11201	2009/04/01	09:25:48	46.2	49.9	42.3	41.3	41.5
11206	2009/04/01	09:26:03	39.7	41.8	42.1	43.4	43.7
11211	2009/04/01	09:26:18	43.7	41.8	44.1	40.1	39.8
11216	2009/04/01	09:26:33	42.0	43.6	44.6	52.8	51.7
11221	2009/04/01	09:26:48	53.6	68.3	64.6	52.1	47.9
11226	2009/04/01	09:27:03	45.9	48.1	44.9	43.7	44.0
11231	2009/04/01	09:27:18	42.4	44.4	42.5	45.4	43.3
11236	2009/04/01	09:27:33	42.8	45.1	46.0	44.9	44.4
11241	2009/04/01	09:27:48	44.2	45.8	45.8	45.5	47.2
11246	2009/04/01	09:28:03	45.2	48.4	49.9	53.9	67.2
11251	2009/04/01	09:28:18	70.8	61.1	54.9	58.9	68.9
11256	2009/04/01	09:28:33	65.2	54.7	51.7	47.3	44.1
11261	2009/04/01	09:28:48	42.4	42.2	43.5	44.5	44.5
11266	2009/04/01	09:29:03	44.6	43.6	43.4	46.8	47.9
11271	2009/04/01	09:29:18	50.3	56.2	70.8	59.5	69.9
11276	2009/04/01	09:29:33	57.6	51.5	51.8	45.0	44.7
11281	2009/04/01	09:29:48	42.6	44.2	43.5	43.2	42.9
11286	2009/04/01	09:30:03	45.8	44.4	43.7	43.8	44.4
11291	2009/04/01	09:30:18	43.9	45.9	53.9	55.1	70.3
11296	2009/04/01	09:30:33	62.7	50.3	49.6	46.6	46.0
11301	2009/04/01	09:30:48	48.7	52.0	58.4	75.2	56.7
11306	2009/04/01	09:31:03	52.2	51.2	51.9	45.7	45.4
11311	2009/04/01	09:31:18	52.1	50.4	57.9	76.0	61.8

11316	2009/04/01	09:31:33	53.3	52.7	48.8	53.2	58.7
11321	2009/04/01	09:31:48	69.7	55.4	50.4	46.4	46.0
11326	2009/04/01	09:32:03	46.4	44.1	43.0	43.8	43.9
11331	2009/04/01	09:32:18	43.2	43.7	43.5	44.5	43.5
11336	2009/04/01	09:32:33	41.3	43.8	43.0	43.2	45.1
11341	2009/04/01	09:32:48	43.1	43.1	41.9	42.5	42.4
11346	2009/04/01	09:33:03	41.3	42.7	41.8	41.7	42.9
11351	2009/04/01	09:33:18	42.8	46.6	42.8	45.1	44.7
11356	2009/04/01	09:33:33	44.6	44.2	44.4	45.7	44.2
11361	2009/04/01	09:33:48	45.2	44.0	44.4	43.5	44.4
11366	2009/04/01	09:34:03	44.8	44.4	45.7	45.1	44.9
11371	2009/04/01	09:34:18	46.8	54.1	52.9	60.5	73.2
11376	2009/04/01	09:34:33	56.9	53.3	47.9	53.1	53.9
11381	2009/04/01	09:34:48	59.7	69.1	55.8	52.8	49.8
11386	2009/04/01	09:35:03	47.3	48.6	46.1	52.8	54.4
11391	2009/04/01	09:35:18	66.8	70.6	57.8	57.1	62.1
11396	2009/04/01	09:35:33	69.5	53.0	48.3	47.7	42.5
11401	2009/04/01	09:35:48	43.7	43.0	42.9	43.2	44.0
11406	2009/04/01	09:36:03	44.3	43.8	44.1	41.2	40.2
11411	2009/04/01	09:36:18	41.2	47.3	53.6	66.5	64.2
11416	2009/04/01	09:36:33	53.0	47.6	44.0	45.7	34.8
11421	2009/04/01	09:36:48	36.6	39.3	37.8	41.3	36.9
11426	2009/04/01	09:37:03	35.8	39.6	40.9	39.4	37.0
11431	2009/04/01	09:37:18	39.7	41.7	50.5	49.0	57.6
11436	2009/04/01	09:37:33	69.8	54.3	52.7	43.8	45.8
11441	2009/04/01	09:37:48	38.9	37.9	35.7	34.6	32.1
11446	2009/04/01	09:38:03	32.2	32.3	32.7	32.4	35.7
11451	2009/04/01	09:38:18	40.7	43.1	42.1	42.8	44.9
11456	2009/04/01	09:38:33	45.4	45.1	44.0	43.7	44.5
11461	2009/04/01	09:38:48	43.8	44.3	43.5	45.2	44.9
11466	2009/04/01	09:39:03	44.6	47.1	50.1	51.6	57.8
11471	2009/04/01	09:39:18	69.9	54.7	52.9	47.9	48.0
11476	2009/04/01	09:39:33	47.8	44.7	44.1	42.9	43.3
11481	2009/04/01	09:39:48	43.1	44.0	45.0	45.7	49.9
11486	2009/04/01	09:40:03	52.3	56.9	75.4	64.5	54.2
11491	2009/04/01	09:40:18	49.1	46.9	50.9	42.9	43.2
11496	2009/04/01	09:40:33	42.5	43.9	44.3	44.8	42.6
11501	2009/04/01	09:40:48	44.1	45.6	45.5	45.0	46.6
11506	2009/04/01	09:41:03	45.9	50.8	49.6	52.2	60.0
11511	2009/04/01	09:41:18	69.7	53.6	51.2	47.3	45.5
11516	2009/04/01	09:41:33	46.7	42.1	41.0	43.8	48.0
11521	2009/04/01	09:41:48	48.3	55.0	59.9	67.0	54.4
11526	2009/04/01	09:42:03	49.0	44.4	39.3	40.4	42.1
11531	2009/04/01	09:42:18	34.2	33.1	31.9	32.4	32.1
11536	2009/04/01	09:42:33	32.1	31.8	32.9	36.9	37.0
11541	2009/04/01	09:42:48	38.9	41.1	40.6	41.2	41.3
11546	2009/04/01	09:43:03	38.4	40.4	37.6	41.3	36.6
11551	2009/04/01	09:43:18	41.4	39.8	39.4	42.2	52.6
11556	2009/04/01	09:43:33	52.6	61.2	73.7	56.5	54.3
11561	2009/04/01	09:43:48	45.8	47.1	45.4	41.4	42.1
11566	2009/04/01	09:44:03	42.4	41.1	41.9	42.6	44.3
11571	2009/04/01	09:44:18	44.1	45.2	43.0	44.2	42.7
11576	2009/04/01	09:44:33	45.3	46.6	43.7	51.0	51.6
11581	2009/04/01	09:44:48	59.6	72.3	55.3	49.3	45.3
11586	2009/04/01	09:45:03	49.4	43.1	39.0	38.5	42.0
11591	2009/04/01	09:45:18	39.9	43.0	51.2	55.9	67.7
11596	2009/04/01	09:45:33	66.0	51.9	46.8	45.9	46.7
11601	2009/04/01	09:45:48	39.6	39.3	41.6	35.2	33.7
11606	2009/04/01	09:46:03	38.8	38.7	50.1	56.3	58.5
11611	2009/04/01	09:46:18	69.6	67.3	55.6	52.2	56.7
11616	2009/04/01	09:46:33	66.8	86.4	71.6	65.3	51.1
11621	2009/04/01	09:46:48	47.0	42.4	41.5	42.4	42.5
11626	2009/04/01	09:47:03	43.4	42.4	43.5	44.0	41.4
11631	2009/04/01	09:47:18	44.7	41.9	42.9	40.6	40.2
11636	2009/04/01	09:47:33	39.3	39.0	39.9	42.2	40.1
11641	2009/04/01	09:47:48	42.7	46.3	55.0	58.4	71.8
11646	2009/04/01	09:48:03	66.2	55.5	57.6	47.0	43.1
11651	2009/04/01	09:48:18	41.3	45.4	50.5	52.8	60.1
11656	2009/04/01	09:48:33	69.4	53.8	50.6	56.2	54.5
11661	2009/04/01	09:48:48	63.2	74.9	57.9	51.4	46.3
11666	2009/04/01	09:49:03	46.2	41.5	38.7	37.1	39.9
11671	2009/04/01	09:49:18	37.2	32.0	32.0	32.9	36.5
11676	2009/04/01	09:49:33	39.0	42.4	48.9	47.1	55.0
11681	2009/04/01	09:49:48	72.3	55.5	47.0	43.9	42.0
11686	2009/04/01	09:50:03	41.7	40.2	39.6	42.2	44.0
11691	2009/04/01	09:50:18	43.6	42.6	43.5	45.0	45.7
11696	2009/04/01	09:50:33	52.7	56.5	58.7	72.6	70.2
11701	2009/04/01	09:50:48	57.5	52.2	50.5	52.6	50.5
11706	2009/04/01	09:51:03	57.3	66.7	73.6	56.5	54.0
11711	2009/04/01	09:51:18	46.6	44.7	43.0	43.0	43.0
11716	2009/04/01	09:51:33	41.3	41.1	41.9	44.2	43.5
11721	2009/04/01	09:51:48	43.3	43.9	45.8	51.7	61.8
11726	2009/04/01	09:52:03	71.4	71.6	68.1	57.9	52.1
11731	2009/04/01	09:52:18	48.0	49.0	45.8	43.5	43.8
11736	2009/04/01	09:52:33	44.4	41.9	43.7	43.3	44.7
11741	2009/04/01	09:52:48	44.0	43.4	42.1	42.4	41.9
11746	2009/04/01	09:53:03	32.1	35.6	34.9	35.6	40.7
11751	2009/04/01	09:53:18	46.8	46.1	53.7	72.7	57.4
11756	2009/04/01	09:53:33	47.7	44.9	41.4	43.6	39.7
11761	2009/04/01	09:53:48	42.4	41.0	44.1	39.7	38.8
11766	2009/04/01	09:54:03	40.9	41.0	41.0	39.7	40.8
11771	2009/04/01	09:54:18	41.8	42.8	42.3	42.0	42.1
11776	2009/04/01	09:54:33	41.2	42.2	44.8	47.0	55.0
11781	2009/04/01	09:54:48	52.5	60.1	80.6	63.0	52.6
11786	2009/04/01	09:55:03	49.5	47.0	47.1	51.9	56.0
11791	2009/04/01	09:55:18	65.1	67.6	52.0	48.8	45.5
11796	2009/04/01	09:55:33	45.6	43.6	41.3	40.2	36.5
11801	2009/04/01	09:55:48	38.9	41.7	42.8	43.9	51.0
11806	2009/04/01	09:56:03	49.2	53.3	66.2	74.8	60.3

11811	2009/04/01	09:56:18	51.0	46.8	46.3	46.0	52.4
11816	2009/04/01	09:56:33	50.1	51.9	63.2	69.1	54.1
11821	2009/04/01	09:56:48	53.1	52.3	56.5	59.2	65.8
11826	2009/04/01	09:57:03	55.3	47.8	45.3	40.2	40.6
11831	2009/04/01	09:57:18	40.6	35.0	33.4	32.8	31.9
11836	2009/04/01	09:57:33	31.8	31.2	36.2	39.1	38.8
11841	2009/04/01	09:57:48	38.1	40.6	37.8	41.6	41.2
11846	2009/04/01	09:58:03	34.9	40.5	39.9	40.0	41.3
11851	2009/04/01	09:58:18	42.5	43.1	42.4	39.2	41.6
11856	2009/04/01	09:58:33	41.6	42.6	42.1	43.0	44.5
11861	2009/04/01	09:58:48	43.9	48.3	54.3	54.8	60.1
11866	2009/04/01	09:59:03	73.1	56.8	54.5	51.4	49.4
11871	2009/04/01	09:59:18	49.1	40.3	40.4	39.5	34.1
11876	2009/04/01	09:59:33	32.6	32.4	32.5	32.8	33.2
11881	2009/04/01	09:59:48	32.2	32.7	36.9	37.5	38.6
11886	2009/04/01	10:00:03	37.9	36.4	38.2	36.6	40.3
11891	2009/04/01	10:00:18	40.8	39.8	39.2	42.0	40.2
11896	2009/04/01	10:00:33	39.4	44.0	48.6	53.3	56.0
11901	2009/04/01	10:00:48	78.4	63.2	60.8	72.2	58.3
11906	2009/04/01	10:01:03	55.5	48.6	52.8	61.0	74.3
11911	2009/04/01	10:01:18	60.7	56.8	51.4	44.0	42.4
11916	2009/04/01	10:01:33	41.3	39.5	37.5	39.4	36.9
11921	2009/04/01	10:01:48	35.9	37.2	40.1	40.4	38.3
11926	2009/04/01	10:02:03	41.7	39.0	39.3	36.2	41.3
11931	2009/04/01	10:02:18	39.2	41.9	39.3	32.0	31.9
11936	2009/04/01	10:02:33	32.6	32.0	32.0	33.2	32.5
11941	2009/04/01	10:02:48	32.4	33.7	36.2	36.6	42.7
11946	2009/04/01	10:03:03	57.7	60.8	69.7	56.6	55.5
11951	2009/04/01	10:03:18	50.6	51.0	53.8	69.6	64.4
11956	2009/04/01	10:03:33	60.4	69.9	55.2	51.2	46.9
11961	2009/04/01	10:03:48	45.5	46.1	47.6	47.4	50.4
11966	2009/04/01	10:04:03	53.2	72.1	60.7	49.8	47.2
11971	2009/04/01	10:04:18	46.1	47.7	50.6	54.4	63.8
11976	2009/04/01	10:04:33	69.3	55.0	49.7	47.1	47.6
11981	2009/04/01	10:04:48	39.7	36.2	33.3	32.1	32.4
11986	2009/04/01	10:05:03	34.4	34.9	39.2	35.7	36.7
11991	2009/04/01	10:05:18	36.1	33.2	34.9	33.8	32.9
11996	2009/04/01	10:05:33	32.8	35.6	39.2	42.7	46.4
12001	2009/04/01	10:05:48	50.8	55.5	59.7	70.2	54.1
12006	2009/04/01	10:06:03	50.8	48.9	49.7	49.0	42.8
12011	2009/04/01	10:06:18	47.0	42.9	44.8	41.8	44.9
12016	2009/04/01	10:06:33	43.6	44.6	48.1	46.7	45.3
12021	2009/04/01	10:06:48	48.5	54.0	61.0	66.3	56.2
12026	2009/04/01	10:07:03	49.1	49.0	42.8	43.9	42.5
12031	2009/04/01	10:07:18	39.6	41.6	44.3	40.9	40.4
12036	2009/04/01	10:07:33	42.6	41.1	41.6	41.8	40.9
12041	2009/04/01	10:07:48	43.2	43.2	44.2	40.1	40.6
12046	2009/04/01	10:08:03	43.6	43.8	43.9	43.8	42.2
12051	2009/04/01	10:08:18	42.6	44.2	40.8	43.5	41.4
12056	2009/04/01	10:08:33	44.8	44.4	44.1	42.1	41.1
12061	2009/04/01	10:08:48	43.4	42.0	44.9	45.7	54.8
12066	2009/04/01	10:09:03	62.0	73.4	64.3	54.8	57.0
12071	2009/04/01	10:09:18	47.6	51.1	54.7	66.2	68.8
12076	2009/04/01	10:09:33	53.5	49.3	57.8	62.9	74.4
12081	2009/04/01	10:09:48	75.4	58.6	57.1	50.5	43.6
12086	2009/04/01	10:10:03	44.5	44.1	41.7	43.6	44.4
12091	2009/04/01	10:10:18	42.7	45.3	43.8	44.3	46.5
12096	2009/04/01	10:10:33	53.2	56.9	64.2	72.3	56.8
12101	2009/04/01	10:10:48	53.4	45.8	46.8	42.9	35.3
12106	2009/04/01	10:11:03	33.6	32.9	34.9	35.5	35.5
12111	2009/04/01	10:11:18	37.3	38.1	36.0	41.9	41.8
12116	2009/04/01	10:11:33	43.1	38.6	38.4	39.3	40.9
12121	2009/04/01	10:11:48	45.8	50.1	58.1	61.8	70.8
12126	2009/04/01	10:12:03	59.1	55.7	53.2	45.5	44.2
12131	2009/04/01	10:12:18	45.8	43.4	44.1	42.4	41.7
12136	2009/04/01	10:12:33	43.6	45.9	45.3	45.6	44.3
12141	2009/04/01	10:12:48	43.8	42.5	41.9	42.5	41.1
12146	2009/04/01	10:13:03	45.3	43.9	40.8	43.0	43.2
12151	2009/04/01	10:13:18	42.5	42.2	38.1	37.8	39.5
12156	2009/04/01	10:13:33	40.7	42.1	38.5	36.4	38.5
12161	2009/04/01	10:13:48	44.4	42.2	36.3	33.9	32.6
12166	2009/04/01	10:14:03	32.8	32.9	32.4	32.2	32.1
12171	2009/04/01	10:14:18	32.3	33.1	37.5	36.4	41.8
12176	2009/04/01	10:14:33	41.2	40.0	39.4	37.7	32.4
12181	2009/04/01	10:14:48	31.7	31.9	33.3	33.1	33.8
12186	2009/04/01	10:15:03	40.6	32.6	32.4	33.4	37.3
12191	2009/04/01	10:15:18	41.8	47.1	54.0	55.7	62.3
12196	2009/04/01	10:15:33	72.7	55.6	52.2	47.4	49.5
12201	2009/04/01	10:15:48	46.3	40.0	43.6	42.2	42.7
12206	2009/04/01	10:16:03	42.0	43.2	42.9	43.3	44.1
12211	2009/04/01	10:16:18	42.5	44.1	41.3	42.8	43.8
12216	2009/04/01	10:16:33	46.0	47.4	59.9	60.1	69.5
12221	2009/04/01	10:16:48	59.0	63.7	65.6	52.3	49.2
12226	2009/04/01	10:17:03	45.9	47.7	44.0	42.2	42.2
12231	2009/04/01	10:17:18	40.7	47.4	53.1	51.7	58.0
12236	2009/04/01	10:17:33	71.0	53.7	48.0	43.1	42.3
12241	2009/04/01	10:17:48	41.9	40.9	40.4	41.7	41.0
12246	2009/04/01	10:18:03	41.8	43.4	40.9	42.7	40.3
12251	2009/04/01	10:18:18	47.2	56.3	59.8	75.8	61.7
12256	2009/04/01	10:18:33	55.6	50.6	47.9	45.0	45.2
12261	2009/04/01	10:18:48	46.0	45.6	45.3	44.4	44.5
12266	2009/04/01	10:19:03	45.3	44.4	43.7	45.1	46.0
12271	2009/04/01	10:19:18	45.8	47.4	47.6	53.1	59.0
12276	2009/04/01	10:19:33	69.9	54.6	65.9	65.6	51.7
12281	2009/04/01	10:19:48	49.5	44.1	42.7	37.2	36.5
12286	2009/04/01	10:20:03	36.6	35.0	37.4	38.2	37.6
12291	2009/04/01	10:20:18	37.9	42.0	41.3	35.6	41.1
12296	2009/04/01	10:20:33	43.2	42.4	43.0	43.0	42.7
12301	2009/04/01	10:20:48	43.1	40.0	42.0	43.6	43.7

12306	2009/04/01	10:21:03	43.8	43.7	44.8	44.1	44.6
12311	2009/04/01	10:21:18	44.2	45.5	43.7	43.2	43.8
12316	2009/04/01	10:21:33	41.9	40.4	41.2	42.7	40.1
12321	2009/04/01	10:21:48	40.5	40.9	42.1	42.1	43.0
12326	2009/04/01	10:22:03	44.5	43.7	40.9	42.4	41.4
12331	2009/04/01	10:22:18	43.6	44.1	47.0	54.7	59.5
12336	2009/04/01	10:22:33	69.5	66.4	54.6	49.6	47.0
12341	2009/04/01	10:22:48	55.1	55.5	57.9	83.1	60.8
12346	2009/04/01	10:23:03	54.9	48.1	45.2	44.0	40.0
12351	2009/04/01	10:23:18	38.9	38.0	41.0	40.7	36.9
12356	2009/04/01	10:23:33	41.4	39.7	34.6	33.6	34.1
12361	2009/04/01	10:23:48	34.3	37.6	37.1	38.6	41.8
12366	2009/04/01	10:24:03	49.7	54.9	61.7	73.9	55.8
12371	2009/04/01	10:24:18	51.7	46.8	48.3	41.4	39.1
12376	2009/04/01	10:24:33	38.4	33.3	31.8	32.2	32.2
12381	2009/04/01	10:24:48	32.3	32.5	32.4	32.5	32.3
12386	2009/04/01	10:25:03	31.9	32.5	36.0	40.6	33.7
12391	2009/04/01	10:25:18	36.9	33.1	32.4	32.5	38.2
12396	2009/04/01	10:25:33	38.6	40.0	38.2	40.4	41.6
12401	2009/04/01	10:25:48	41.3	42.0	42.9	49.3	49.9
12406	2009/04/01	10:26:03	54.4	67.8	68.6	54.3	48.6
12411	2009/04/01	10:26:18	44.8	48.0	39.2	39.1	38.5
12416	2009/04/01	10:26:33	38.8	38.0	38.1	34.9	32.4
12421	2009/04/01	10:26:48	32.0	34.5	37.7	36.4	38.1
12426	2009/04/01	10:27:03	40.8	37.8	37.7	39.4	40.0
12431	2009/04/01	10:27:18	40.4	42.7	41.2	41.3	39.3
12436	2009/04/01	10:27:33	40.5	41.8	41.6	44.9	44.8
12441	2009/04/01	10:27:48	46.1	50.2	51.6	55.2	75.5
12446	2009/04/01	10:28:03	64.8	53.5	50.3	48.8	52.5
12451	2009/04/01	10:28:18	50.0	51.0	54.3	62.9	69.4
12456	2009/04/01	10:28:33	52.7	48.3	45.6	50.3	49.5
12461	2009/04/01	10:28:48	55.4	73.5	63.3	47.7	47.2
12466	2009/04/01	10:29:03	42.2	43.7	40.4	39.0	41.7
12471	2009/04/01	10:29:18	37.6	41.6	39.8	36.8	35.6
12476	2009/04/01	10:29:33	38.8	39.0	39.4	35.0	36.2
12481	2009/04/01	10:29:48	36.6	40.0	40.2	41.2	45.1
12486	2009/04/01	10:30:03	52.3	49.7	53.1	66.3	71.0
12491	2009/04/01	10:30:18	55.2	54.0	49.0	50.4	46.5
12496	2009/04/01	10:30:33	46.0	50.3	50.4	53.2	60.8
12501	2009/04/01	10:30:48	68.3	54.7	50.7	47.1	43.3
12506	2009/04/01	10:31:03	43.5	41.4	40.6	38.5	38.9
12511	2009/04/01	10:31:18	35.7	39.9	34.0	38.8	41.0
12516	2009/04/01	10:31:33	40.1	38.0	39.3	39.9	38.3
12521	2009/04/01	10:31:48	34.1	32.5	32.9	34.2	39.3
12526	2009/04/01	10:32:03	39.9	38.3	39.3	43.6	44.3
12531	2009/04/01	10:32:18	54.2	60.0	74.0	66.0	56.0
12536	2009/04/01	10:32:33	57.1	46.4	44.8	45.0	40.4
12541	2009/04/01	10:32:48	40.4	41.1	41.4	40.9	40.8
12546	2009/04/01	10:33:03	41.4	40.4	41.7	41.9	43.3
12551	2009/04/01	10:33:18	40.3	41.0	36.9	32.9	32.5
12556	2009/04/01	10:33:33	37.9	39.7	39.4	40.6	41.6
12561	2009/04/01	10:33:48	40.9	42.4	44.0	44.3	42.9
12566	2009/04/01	10:34:03	40.4	41.9	38.6	42.1	40.1
12571	2009/04/01	10:34:18	40.5	40.8	42.9	45.6	54.7
12576	2009/04/01	10:34:33	59.1	70.7	57.2	53.0	49.3
12581	2009/04/01	10:34:48	44.7	41.1	42.7	41.7	43.4
12586	2009/04/01	10:35:03	41.5	41.7	43.3	43.5	42.1
12591	2009/04/01	10:35:18	40.9	40.5	40.6	42.4	41.6
12596	2009/04/01	10:35:33	40.1	37.0	32.9	42.1	35.9
12601	2009/04/01	10:35:48	37.3	41.0	39.8	40.2	43.8
12606	2009/04/01	10:36:03	39.3	40.2	39.4	40.6	42.1
12611	2009/04/01	10:36:18	42.6	43.8	48.9	59.2	69.9
12616	2009/04/01	10:36:33	72.0	59.9	73.1	61.2	54.3
12621	2009/04/01	10:36:48	53.8	43.9	42.0	41.9	36.5
12626	2009/04/01	10:37:03	40.4	32.3	34.2	37.0	38.2
12631	2009/04/01	10:37:18	38.7	41.6	40.7	43.1	42.6
12636	2009/04/01	10:37:33	45.1	46.8	54.1	52.1	57.1
12641	2009/04/01	10:37:48	75.1	66.1	52.4	49.8	51.8
12646	2009/04/01	10:38:03	51.3	57.3	74.3	67.9	52.4
12651	2009/04/01	10:38:18	51.9	47.5	45.7	49.5	43.2
12656	2009/04/01	10:38:33	42.6	37.9	37.2	37.7	32.3
12661	2009/04/01	10:38:48	32.3	31.7	32.4	31.8	33.0
12666	2009/04/01	10:39:03	36.2	32.2	32.6	32.1	31.9
12671	2009/04/01	10:39:18	36.3	36.7	39.8	51.8	50.3
12676	2009/04/01	10:39:33	58.2	67.4	74.9	61.8	60.8
12681	2009/04/01	10:39:48	73.3	66.2	54.6	51.2	44.6
12686	2009/04/01	10:40:03	38.9	39.9	35.7	36.7	36.8
12691	2009/04/01	10:40:18	38.7	39.9	36.9	39.9	37.1
12696	2009/04/01	10:40:33	37.8	39.4	36.4	38.7	40.5
12701	2009/04/01	10:40:48	42.4	43.0	43.8	40.5	40.8
12706	2009/04/01	10:41:03	41.6	41.9	42.3	43.6	41.5
12711	2009/04/01	10:41:18	42.5	39.8	36.7	34.0	34.1
12716	2009/04/01	10:41:33	31.9	31.7	32.2	33.2	31.8
12721	2009/04/01	10:41:48	31.8	31.6	35.3	37.6	40.8
12726	2009/04/01	10:42:03	39.8	41.8	39.4	38.7	41.2
12731	2009/04/01	10:42:18	37.5	41.5	42.6	44.9	42.5
12736	2009/04/01	10:42:33	43.3	41.4	40.6	39.2	42.1
12741	2009/04/01	10:42:48	41.4	44.1	43.9	44.6	44.5
12746	2009/04/01	10:43:03	45.8	45.8	44.8	44.6	44.1
12751	2009/04/01	10:43:18	44.6	44.9	44.4	44.5	43.0
12756	2009/04/01	10:43:33	42.2	42.4	43.4	41.4	39.5
12761	2009/04/01	10:43:48	38.6	36.1	40.9	40.9	39.1
12766	2009/04/01	10:44:03	35.2	38.9	39.4	38.6	38.4
12771	2009/04/01	10:44:18	36.1	36.6	36.9	41.1	41.1
12776	2009/04/01	10:44:33	40.3	39.7	32.8	32.9	33.1
12781	2009/04/01	10:44:48	34.1	34.1	34.4	35.1	36.7
12786	2009/04/01	10:45:03	39.8	37.8	37.9	40.7	35.7
12791	2009/04/01	10:45:18	36.4	38.1	42.2	44.2	42.7
12796	2009/04/01	10:45:33	43.1	44.4	42.4	44.3	41.5

12801	2009/04/01	10:45:48	40.9	39.8	40.2	42.8	41.4
12806	2009/04/01	10:46:03	42.3	43.4	43.2	42.6	43.7
12811	2009/04/01	10:46:18	45.1	42.2	43.0	42.1	45.5
12816	2009/04/01	10:46:33	43.4	41.6	43.0	43.1	42.1
12821	2009/04/01	10:46:48	42.3	41.3	41.3	41.9	43.7
12826	2009/04/01	10:47:03	42.2	44.1	41.8	43.0	44.2
12831	2009/04/01	10:47:18	44.6	45.2	45.2	43.3	42.8
12836	2009/04/01	10:47:33	43.1	43.2	43.0	42.3	40.9
12841	2009/04/01	10:47:48	41.0	41.6	41.0	41.0	41.9
12846	2009/04/01	10:48:03	40.3	40.1	41.1	42.7	46.8
12851	2009/04/01	10:48:18	58.3	60.4	72.8	62.1	56.8
12856	2009/04/01	10:48:33	52.7	46.1	46.9	45.6	35.4
12861	2009/04/01	10:48:48	32.7	33.0	33.4	34.7	34.8
12866	2009/04/01	10:49:03	34.2	35.9	37.0	36.8	37.6
12871	2009/04/01	10:49:18	35.9	37.2	33.3	33.1	34.3
12876	2009/04/01	10:49:33	40.1	39.2	33.1	33.2	34.7
12881	2009/04/01	10:49:48	34.8	31.8	37.1	37.4	40.0
12886	2009/04/01	10:50:03	38.9	35.7	40.0	31.7	32.0
12891	2009/04/01	10:50:18	32.4	31.9	32.7	32.4	33.4
12896	2009/04/01	10:50:33	38.2	36.1	34.0	33.1	40.3
12901	2009/04/01	10:50:48	31.7	32.5	33.9	34.7	31.5
12906	2009/04/01	10:51:03	31.8	32.1	32.8	32.5	32.3
12911	2009/04/01	10:51:18	31.8	31.6	32.1	31.8	32.0
12916	2009/04/01	10:51:33	32.1	37.2	35.0	38.0	37.2
12921	2009/04/01	10:51:48	34.8	38.1	41.1	39.6	37.6
12926	2009/04/01	10:52:03	39.2	41.6	39.7	42.7	40.7
12931	2009/04/01	10:52:18	34.2	33.8	32.1	31.6	31.8
12936	2009/04/01	10:52:33	32.6	32.6	31.6	31.9	31.9
12941	2009/04/01	10:52:48	32.2	36.5	39.2	37.4	39.1
12946	2009/04/01	10:53:03	39.0	39.4	31.7	32.0	32.1
12951	2009/04/01	10:53:18	32.1	32.0	31.9	32.3	39.2
12956	2009/04/01	10:53:33	43.0	41.8	38.0	35.4	37.2
12961	2009/04/01	10:53:48	43.6	35.0	33.2	33.3	32.7
12966	2009/04/01	10:54:03	32.7	37.4	38.8	41.9	43.2
12971	2009/04/01	10:54:18	43.0	40.7	42.4	43.1	39.3
12976	2009/04/01	10:54:33	33.2	32.0	34.0	33.4	32.4
12981	2009/04/01	10:54:48	32.0	31.7	32.2	32.1	32.6
12986	2009/04/01	10:55:03	33.1	38.0	35.9	41.8	38.5
12991	2009/04/01	10:55:18	34.6	31.8	32.6	32.7	38.9
12996	2009/04/01	10:55:33	35.8	31.6	35.7	38.5	36.7
13001	2009/04/01	10:55:48	39.4	32.4	32.7	32.4	39.2
13006	2009/04/01	10:56:03	41.9	45.2	42.3	57.0	56.0
13011	2009/04/01	10:56:18	64.5	70.5	54.5	54.1	49.2
13016	2009/04/01	10:56:33	44.7	37.2	35.8	38.5	35.0
13021	2009/04/01	10:56:48	39.6	38.7	36.6	36.2	34.1
13026	2009/04/01	10:57:03	32.4	39.1	37.0	37.7	33.6
13031	2009/04/01	10:57:18	37.3	39.7	42.7	39.8	39.9
13036	2009/04/01	10:57:33	39.2	38.4	40.6	40.8	42.5
13041	2009/04/01	10:57:48	42.8	45.6	51.4	51.9	58.1
13046	2009/04/01	10:58:03	70.8	56.0	54.1	48.0	46.1
13051	2009/04/01	10:58:18	48.4	39.8	39.8	42.2	37.5
13056	2009/04/01	10:58:33	39.9	40.4	38.5	41.9	41.7
13061	2009/04/01	10:58:48	42.2	43.1	40.1	41.1	40.5
13066	2009/04/01	10:59:03	42.5	39.5	38.0	33.3	33.2
13071	2009/04/01	10:59:18	35.5	40.8	46.3	55.9	63.0
13076	2009/04/01	10:59:33	69.0	58.3	58.6	69.4	68.2
13081	2009/04/01	10:59:48	55.6	48.2	46.0	49.7	36.2
13086	2009/04/01	11:00:03	33.7	37.4	33.9	32.7	35.3
13091	2009/04/01	11:00:18	44.0	46.4	60.2	61.7	73.7
13096	2009/04/01	11:00:33	60.5	55.9	49.6	43.4	41.4
13101	2009/04/01	11:00:48	40.5	38.5	39.7	42.7	42.7
13106	2009/04/01	11:01:03	43.8	42.1	44.0	41.8	42.6
13111	2009/04/01	11:01:18	42.6	43.8	43.0	40.5	41.5
13116	2009/04/01	11:01:33	43.6	44.8	44.1	43.1	43.4
13121	2009/04/01	11:01:48	42.6	41.9	39.9	35.3	38.1
13126	2009/04/01	11:02:03	42.7	50.6	50.4	57.9	75.7
13131	2009/04/01	11:02:18	64.8	53.8	52.1	47.2	49.3
13136	2009/04/01	11:02:33	43.8	36.0	32.9	32.1	31.9
13141	2009/04/01	11:02:48	31.7	32.1	31.9	31.7	32.8
13146	2009/04/01	11:03:03	33.6	31.8	34.9	35.3	37.8
13151	2009/04/01	11:03:18	32.8	32.7	31.9	32.4	32.5
13156	2009/04/01	11:03:33	32.2	34.3	33.8	35.2	34.1
13161	2009/04/01	11:03:48	33.8	34.2	38.6	38.9	38.5
13166	2009/04/01	11:04:03	37.1	37.3	38.4	40.5	41.6
13171	2009/04/01	11:04:18	44.2	48.5	53.3	57.2	67.0
13176	2009/04/01	11:04:33	71.0	54.0	54.3	48.9	48.8
13181	2009/04/01	11:04:48	50.0	38.2	41.4	41.2	45.0
13186	2009/04/01	11:05:03	51.0	53.3	57.3	78.1	60.1
13191	2009/04/01	11:05:18	54.7	51.1	52.6	52.7	57.2
13196	2009/04/01	11:05:33	77.3	66.6	52.9	50.4	42.8
13201	2009/04/01	11:05:48	44.8	40.4	39.7	37.5	34.8
13206	2009/04/01	11:06:03	40.2	40.7	38.7	39.6	34.2
13211	2009/04/01	11:06:18	34.7	34.8	33.6	34.0	35.9
13216	2009/04/01	11:06:33	37.2	38.1	39.7	40.2	39.5
13221	2009/04/01	11:06:48	40.2	40.5	43.7	43.9	44.5
13226	2009/04/01	11:07:03	44.1	44.3	42.8	43.5	44.1
13231	2009/04/01	11:07:18	46.3	50.3	49.6	57.0	71.8
13236	2009/04/01	11:07:33	56.8	48.5	45.0	41.5	44.3
13241	2009/04/01	11:07:48	40.7	40.5	40.7	41.2	40.9
13246	2009/04/01	11:08:03	40.1	39.4	39.7	40.3	39.5
13251	2009/04/01	11:08:18	42.7	43.7	47.1	50.7	54.4
13256	2009/04/01	11:08:33	58.1	69.7	56.4	54.5	65.1
13261	2009/04/01	11:08:48	82.6	72.8	55.4	54.0	40.9
13266	2009/04/01	11:09:03	35.7	35.1	36.5	34.7	36.6
13271	2009/04/01	11:09:18	31.9	31.9	32.2	32.2	31.9
13276	2009/04/01	11:09:33	33.7	33.8	34.1	38.1	42.7
13281	2009/04/01	11:09:48	39.4	44.5	44.0	42.0	48.1
13286	2009/04/01	11:10:03	52.5	63.5	65.8	58.5	49.0
13291	2009/04/01	11:10:18	48.7	41.0	37.6	37.0	36.6

13296	2009/04/01	11:10:33	37.1	42.2	51.0	51.9	54.5
13301	2009/04/01	11:10:48	64.6	69.1	56.6	50.2	45.7
13306	2009/04/01	11:11:03	50.8	44.7	35.9	36.5	41.5
13311	2009/04/01	11:11:18	41.2	43.7	42.3	41.8	43.4
13316	2009/04/01	11:11:33	43.1	42.5	43.9	45.5	44.6
13321	2009/04/01	11:11:48	45.7	45.2	46.1	42.8	39.7
13326	2009/04/01	11:12:03	38.7	39.6	40.2	42.1	44.3
13331	2009/04/01	11:12:18	42.8	39.9	39.4	43.2	42.1
13336	2009/04/01	11:12:33	43.4	41.2	40.0	39.0	38.4
13341	2009/04/01	11:12:48	41.6	39.1	41.7	37.2	32.3
13346	2009/04/01	11:13:03	32.3	33.6	32.0	31.8	31.9
13351	2009/04/01	11:13:18	31.8	32.1	31.6	31.7	31.9
13356	2009/04/01	11:13:33	32.0	31.6	32.3	31.8	32.3
13361	2009/04/01	11:13:48	31.7	33.6	31.5	31.8	34.5
13366	2009/04/01	11:14:03	35.9	38.7	37.4	40.4	33.6
13371	2009/04/01	11:14:18	37.0	35.7	37.1	31.9	32.2
13376	2009/04/01	11:14:33	32.3	31.8	31.9	39.9	39.8
13381	2009/04/01	11:14:48	37.4	38.6	39.0	31.6	32.1
13386	2009/04/01	11:15:03	31.4	31.7	31.7	32.3	32.8
13391	2009/04/01	11:15:18	39.9	38.8	37.5	40.3	40.1
13396	2009/04/01	11:15:33	39.2	43.5	40.8	41.6	41.3
13401	2009/04/01	11:15:48	38.0	41.2	40.1	40.5	38.5
13406	2009/04/01	11:16:03	38.8	37.0	34.1	32.3	31.5
13411	2009/04/01	11:16:18	32.3	31.5	32.1	32.1	31.6
13416	2009/04/01	11:16:33	35.6	38.3	32.3	37.7	39.3
13421	2009/04/01	11:16:48	39.2	40.6	37.8	32.0	39.2
13426	2009/04/01	11:17:03	40.1	36.5	37.2	32.6	31.9
13431	2009/04/01	11:17:18	32.0	32.1	31.3	31.7	33.7
13436	2009/04/01	11:17:33	32.2	32.3	32.7	31.7	34.1
13441	2009/04/01	11:17:48	39.9	37.0	36.0	36.3	32.1
13446	2009/04/01	11:18:03	31.9	33.2	32.9	40.4	39.8
13451	2009/04/01	11:18:18	38.3	38.9	39.4	37.4	37.9
13456	2009/04/01	11:18:33	39.9	41.2	40.8	41.1	40.3
13461	2009/04/01	11:18:48	41.2	41.3	40.3	41.4	40.0
13466	2009/04/01	11:19:03	40.1	41.0	42.0	47.2	52.0
13471	2009/04/01	11:19:18	55.5	59.4	70.9	52.8	49.2
13476	2009/04/01	11:19:33	45.9	45.3	46.5	45.8	45.1
13481	2009/04/01	11:19:48	51.0	50.7	60.5	74.0	56.1
13486	2009/04/01	11:20:03	49.7	44.5	44.6	45.3	38.1
13491	2009/04/01	11:20:18	45.1	47.4	59.0	69.5	75.8
13496	2009/04/01	11:20:33	56.7	61.1	49.1	41.9	43.8
13501	2009/04/01	11:20:48	40.2	32.1	36.1	34.0	32.2
13506	2009/04/01	11:21:03	32.2	38.9	40.6	36.2	40.3
13511	2009/04/01	11:21:18	40.6	46.9	50.9	53.8	56.6
13516	2009/04/01	11:21:33	71.8	59.8	51.9	47.7	44.3
13521	2009/04/01	11:21:48	48.4	41.9	43.0	38.9	35.6
13526	2009/04/01	11:22:03	38.4	40.0	38.4	42.4	39.8
13531	2009/04/01	11:22:18	34.2	34.6	31.4	31.3	32.0
13536	2009/04/01	11:22:33	31.9	32.1	32.1	32.3	32.0
13541	2009/04/01	11:22:48	32.3	31.6	31.7	35.7	33.6
13546	2009/04/01	11:23:03	32.5	33.0	32.1	32.4	31.9
13551	2009/04/01	11:23:18	31.8	31.9	33.7	32.7	37.5
13556	2009/04/01	11:23:33	33.6	32.2	33.6	32.3	32.0
13561	2009/04/01	11:23:48	31.6	33.1	39.7	40.1	39.7
13566	2009/04/01	11:24:03	40.3	39.4	51.1	40.6	42.1
13571	2009/04/01	11:24:18	40.5	40.7	42.9	42.7	43.0
13576	2009/04/01	11:24:33	40.1	43.7	43.1	43.4	44.1
13581	2009/04/01	11:24:48	41.7	44.1	44.2	41.5	44.1
13586	2009/04/01	11:25:03	44.6	42.6	39.7	38.8	39.6
13591	2009/04/01	11:25:18	40.8	43.3	42.1	37.5	33.6
13596	2009/04/01	11:25:33	36.3	38.0	38.1	41.8	35.8
13601	2009/04/01	11:25:48	38.4	36.4	32.5	39.6	37.6
13606	2009/04/01	11:26:03	36.9	41.9	38.7	37.7	39.3
13611	2009/04/01	11:26:18	35.0	35.6	35.9	37.1	32.0
13616	2009/04/01	11:26:33	32.3	33.1	33.7	38.6	43.9
13621	2009/04/01	11:26:48	52.4	59.1	72.4	66.7	52.5
13626	2009/04/01	11:27:03	51.9	46.1	42.6	37.7	40.3
13631	2009/04/01	11:27:18	36.6	35.1	38.0	38.3	40.1
13636	2009/04/01	11:27:33	39.4	36.6	40.9	40.7	43.4
13641	2009/04/01	11:27:48	48.1	55.4	57.8	75.5	63.9
13646	2009/04/01	11:28:03	53.6	48.0	49.1	39.8	39.4
13651	2009/04/01	11:28:18	39.7	42.4	36.5	38.2	37.9
13656	2009/04/01	11:28:33	39.5	41.5	39.1	38.5	37.7
13661	2009/04/01	11:28:48	37.3	36.3	37.4	34.8	35.6
13666	2009/04/01	11:29:03	32.8	32.6	33.1	37.5	32.8
13671	2009/04/01	11:29:18	31.9	32.6	36.8	33.4	35.8
13676	2009/04/01	11:29:33	32.4	31.8	32.2	31.8	31.9
13681	2009/04/01	11:29:48	31.6	33.8	36.7	34.5	33.2
13686	2009/04/01	11:30:03	31.8	32.2	31.6	31.8	32.3
13691	2009/04/01	11:30:18	32.7	39.9	39.5	51.0	54.7
13696	2009/04/01	11:30:33	65.7	71.7	56.1	49.1	50.6
13701	2009/04/01	11:30:48	42.6	40.2	37.7	39.7	37.0
13706	2009/04/01	11:31:03	38.0	36.6	39.2	35.5	40.1
13711	2009/04/01	11:31:18	36.3	31.3	31.6	41.5	40.3
13716	2009/04/01	11:31:33	40.4	35.9	37.5	37.0	39.6
13721	2009/04/01	11:31:48	37.2	34.7	33.2	34.0	36.1
13726	2009/04/01	11:32:03	36.5	35.7	36.3	34.9	38.9
13731	2009/04/01	11:32:18	37.0	39.9	39.8	38.8	41.3
13736	2009/04/01	11:32:33	43.3	45.1	53.2	52.1	59.0
13741	2009/04/01	11:32:48	77.7	60.8	53.5	48.7	45.1
13746	2009/04/01	11:33:03	44.8	40.0	39.8	40.7	40.0
13751	2009/04/01	11:33:18	39.4	34.3	32.7	34.2	39.2
13756	2009/04/01	11:33:33	38.8	37.8	47.7	57.2	55.5
13761	2009/04/01	11:33:48	62.2	72.8	56.8	52.9	53.0
13766	2009/04/01	11:34:03	59.8	70.7	64.6	53.2	54.2
13771	2009/04/01	11:34:18	41.7	43.4	40.7	39.7	38.3
13776	2009/04/01	11:34:33	39.5	32.7	33.1	33.5	37.7
13781	2009/04/01	11:34:48	34.8	36.8	38.6	34.0	32.1
13786	2009/04/01	11:35:03	31.9	38.1	39.7	41.7	40.5

13791	2009/04/01	11:35:18	41.5	43.7	39.0	40.1	40.6
13796	2009/04/01	11:35:33	44.2	43.2	44.0	43.2	40.7
13801	2009/04/01	11:35:48	41.7	38.7	34.1	35.1	41.9
13806	2009/04/01	11:36:03	41.7	43.2	42.1	41.7	43.1
13811	2009/04/01	11:36:18	43.7	41.8	40.8	33.2	33.4
13816	2009/04/01	11:36:33	34.1	35.9	34.4	39.6	38.4
13821	2009/04/01	11:36:48	37.9	38.7	38.1	41.1	38.9
13826	2009/04/01	11:37:03	37.2	42.0	39.3	37.2	38.0
13831	2009/04/01	11:37:18	37.6	38.4	38.0	41.3	39.5
13836	2009/04/01	11:37:33	36.2	38.0	40.3	42.5	53.2
13841	2009/04/01	11:37:48	59.1	69.6	70.7	56.5	52.5
13846	2009/04/01	11:38:03	49.8	39.5	40.8	36.2	35.0
13851	2009/04/01	11:38:18	32.1	31.6	32.3	33.9	37.0
13856	2009/04/01	11:38:33	32.6	32.2	39.9	33.1	34.0
13861	2009/04/01	11:38:48	35.9	42.4	39.4	32.2	33.7
13866	2009/04/01	11:39:03	32.2	34.0	35.2	37.6	41.8
13871	2009/04/01	11:39:18	49.3	46.6	52.9	62.6	67.1
13876	2009/04/01	11:39:33	50.5	49.4	45.1	42.2	42.4
13881	2009/04/01	11:39:48	36.7	33.8	33.0	32.9	31.8
13886	2009/04/01	11:40:03	32.7	33.1	34.8	33.9	34.3
13891	2009/04/01	11:40:18	31.9	31.8	32.0	31.9	31.6
13896	2009/04/01	11:40:33	32.4	32.7	35.3	38.4	32.6
13901	2009/04/01	11:40:48	32.5	34.7	38.5	37.0	37.3
13906	2009/04/01	11:41:03	38.9	40.2	40.5	39.1	41.1
13911	2009/04/01	11:41:18	40.8	44.4	50.7	50.4	53.9
13916	2009/04/01	11:41:33	72.2	62.6	50.5	46.1	44.9
13921	2009/04/01	11:41:48	46.1	41.5	37.2	34.9	34.1
13926	2009/04/01	11:42:03	39.0	40.6	41.2	38.8	38.3
13931	2009/04/01	11:42:18	36.3	35.8	35.1	40.0	37.5
13936	2009/04/01	11:42:33	40.4	37.4	38.5	37.4	40.2
13941	2009/04/01	11:42:48	40.5	36.3	32.0	31.6	32.2
13946	2009/04/01	11:43:03	35.0	35.2	34.1	34.6	35.0
13951	2009/04/01	11:43:18	39.3	38.7	37.9	36.9	39.1
13956	2009/04/01	11:43:33	38.5	36.0	36.1	38.5	38.6
13961	2009/04/01	11:43:48	41.5	42.7	42.8	43.0	42.2
13966	2009/04/01	11:44:03	43.3	42.2	42.0	42.3	41.3
13971	2009/04/01	11:44:18	41.4	36.5	35.6	35.4	33.9
13976	2009/04/01	11:44:33	38.0	37.7	35.6	39.8	37.2
13981	2009/04/01	11:44:48	32.1	31.8	31.8	32.3	35.6
13986	2009/04/01	11:45:03	41.1	34.8	36.9	40.1	37.3
13991	2009/04/01	11:45:18	43.9	40.7	41.5	39.8	38.0
13996	2009/04/01	11:45:33	39.8	35.7	37.8	40.7	42.0
14001	2009/04/01	11:45:48	48.8	50.8	53.9	71.4	63.1
14006	2009/04/01	11:46:03	52.5	48.5	46.8	46.5	37.9
14011	2009/04/01	11:46:18	38.2	37.0	38.9	41.6	35.8
14016	2009/04/01	11:46:33	34.4	31.8	38.5	31.5	31.6
14021	2009/04/01	11:46:48	31.4	32.1	36.5	33.0	38.2
14026	2009/04/01	11:47:03	42.7	42.5	35.7	37.3	38.6
14031	2009/04/01	11:47:18	41.0	35.1	38.9	40.2	39.8
14036	2009/04/01	11:47:33	40.8	41.7	42.4	47.3	47.2
14041	2009/04/01	11:47:48	55.8	73.4	58.3	48.6	46.6
14046	2009/04/01	11:48:03	40.4	42.6	44.2	41.5	37.0
14051	2009/04/01	11:48:18	33.5	36.1	33.2	32.5	32.5
14056	2009/04/01	11:48:33	31.5	33.1	31.8	31.6	36.6
14061	2009/04/01	11:48:48	38.7	39.0	38.6	40.2	38.5
14066	2009/04/01	11:49:03	40.3	40.3	39.8	40.4	46.2
14071	2009/04/01	11:49:18	58.1	60.1	69.3	60.1	51.5
14076	2009/04/01	11:49:33	51.8	43.6	40.9	40.9	42.3
14081	2009/04/01	11:49:48	42.6	44.4	50.6	47.1	55.4
14086	2009/04/01	11:50:03	74.2	62.2	51.4	45.1	43.7
14091	2009/04/01	11:50:18	44.2	42.3	42.4	43.4	42.8
14096	2009/04/01	11:50:33	39.5	39.9	40.1	38.9	38.0
14101	2009/04/01	11:50:48	36.0	35.6	38.8	38.6	35.0
14106	2009/04/01	11:51:03	33.0	34.8	32.7	31.8	31.6
14111	2009/04/01	11:51:18	32.1	34.5	32.4	31.9	31.5
14116	2009/04/01	11:51:33	33.0	31.2	38.4	32.2	33.6
14121	2009/04/01	11:51:48	32.4	32.5	35.1	31.6	31.6
14126	2009/04/01	11:52:03	34.9	32.3	35.7	37.1	33.8
14131	2009/04/01	11:52:18	34.9	38.6	45.1	52.4	51.2
14136	2009/04/01	11:52:33	58.1	72.1	54.9	52.9	48.1
14141	2009/04/01	11:52:48	46.0	46.9	41.7	43.0	38.6
14146	2009/04/01	11:53:03	39.5	38.2	37.0	40.8	43.0
14151	2009/04/01	11:53:18	41.5	43.5	43.3	40.5	40.1
14156	2009/04/01	11:53:33	41.3	40.9	40.7	38.8	40.0
14161	2009/04/01	11:53:48	40.2	38.2	38.5	37.3	36.5
14166	2009/04/01	11:54:03	35.8	37.0	41.1	40.0	40.6
14171	2009/04/01	11:54:18	34.6	34.5	36.4	37.4	38.2
14176	2009/04/01	11:54:33	34.1	39.6	41.4	39.1	41.3
14181	2009/04/01	11:54:48	39.7	32.3	34.0	36.3	37.9
14186	2009/04/01	11:55:03	39.2	39.4	38.0	35.9	37.4
14191	2009/04/01	11:55:18	39.1	38.4	35.9	33.7	38.9
14196	2009/04/01	11:55:33	36.1	36.0	34.8	35.5	37.6
14201	2009/04/01	11:55:48	38.2	35.5	38.1	37.3	38.4
14206	2009/04/01	11:56:03	36.5	36.6	37.6	35.0	37.6
14211	2009/04/01	11:56:18	35.4	33.5	31.9	31.5	31.9
14216	2009/04/01	11:56:33	31.8	32.0	33.7	32.1	32.5
14221	2009/04/01	11:56:48	34.6	36.2	38.9	32.0	31.4
14226	2009/04/01	11:57:03	31.7	31.4	32.5	31.2	32.6
14231	2009/04/01	11:57:18	32.3	35.7	32.3	33.4	35.0
14236	2009/04/01	11:57:33	33.2	31.5	32.6	31.8	32.3
14241	2009/04/01	11:57:48	32.0	31.9	31.4	31.7	35.0
14246	2009/04/01	11:58:03	32.4	31.5	34.2	33.4	33.4
14251	2009/04/01	11:58:18	35.2	31.7	31.1	31.9	31.3
14256	2009/04/01	11:58:33	31.9	31.7	31.5	32.1	31.7
14261	2009/04/01	11:58:48	32.2	32.1	32.1	32.0	35.2
14266	2009/04/01	11:59:03	34.7	35.1	32.1	32.0	32.1
14271	2009/04/01	11:59:18	32.5	32.1	31.6	32.0	34.1
14276	2009/04/01	11:59:33	39.7	37.9	40.8	43.6	52.6
14281	2009/04/01	11:59:48	50.5	59.3	79.2	61.2	54.7

14286	2009/04/01	12:00:03	49.9	47.8	52.0	44.2	41.7
14291	2009/04/01	12:00:18	40.2	38.9	39.6	41.5	40.7
14296	2009/04/01	12:00:33	39.6	39.3	39.7	39.3	40.8
14301	2009/04/01	12:00:48	39.1	38.4	36.9	40.0	44.1
14306	2009/04/01	12:01:03	42.2	42.2	41.5	41.2	42.8
14311	2009/04/01	12:01:18	42.7	39.6	40.5	36.8	41.7
14316	2009/04/01	12:01:33	43.0	51.5	50.9	61.6	71.4
14321	2009/04/01	12:01:48	75.6	55.9	52.0	47.3	44.8
14326	2009/04/01	12:02:03	41.7	39.8	37.2	38.8	38.6
14331	2009/04/01	12:02:18	39.7	36.3	41.6	40.3	36.5
14336	2009/04/01	12:02:33	34.1	34.8	39.1	44.3	48.9
14341	2009/04/01	12:02:48	51.2	57.1	69.8	55.6	52.3
14346	2009/04/01	12:03:03	46.3	45.5	47.2	40.6	38.6
14351	2009/04/01	12:03:18	37.9	41.7	33.6	35.8	38.2
14356	2009/04/01	12:03:33	38.3	39.3	40.9	40.6	40.6
14361	2009/04/01	12:03:48	38.3	42.1	39.5	40.3	41.8
14366	2009/04/01	12:04:03	39.1	38.6	37.6	38.3	38.0
14371	2009/04/01	12:04:18	37.2	35.1	33.3	35.9	34.5
14376	2009/04/01	12:04:33	34.1	33.8	31.4	31.4	32.3
14381	2009/04/01	12:04:48	32.7	33.2	35.4	37.9	40.1
14386	2009/04/01	12:05:03	37.1	36.9	36.4	40.0	34.3
14391	2009/04/01	12:05:18	34.4	35.8	39.5	38.5	39.0
14396	2009/04/01	12:05:33	40.5	41.2	40.8	36.4	38.0
14401	2009/04/01	12:05:48	38.7	38.6	38.7	38.4	36.6
14406	2009/04/01	12:06:03	34.6	34.6	35.6	40.1	37.5
14411	2009/04/01	12:06:18	40.4	38.4	33.7	31.8	31.9
14416	2009/04/01	12:06:33	32.1	32.3	31.2	31.5	31.7
14421	2009/04/01	12:06:48	31.5	32.0	31.8	31.4	32.2
14426	2009/04/01	12:07:03	32.3	38.3	35.6	36.7	35.5
14431	2009/04/01	12:07:18	35.2	40.4	37.5	36.2	34.5
14436	2009/04/01	12:07:33	33.6	40.0	35.4	36.1	35.0
14441	2009/04/01	12:07:48	35.5	36.2	36.4	36.2	39.4
14446	2009/04/01	12:08:03	37.2	31.9	31.6	31.6	31.7
14451	2009/04/01	12:08:18	32.3	31.9	39.5	31.8	32.6
14456	2009/04/01	12:08:33	31.7	35.2	38.4	40.8	31.9
14461	2009/04/01	12:08:48	32.4	32.9	32.1	33.0	35.6
14466	2009/04/01	12:09:03	32.8	35.9	37.7	37.0	38.1
14471	2009/04/01	12:09:18	32.0	31.6	34.8	35.8	35.7
14476	2009/04/01	12:09:33	35.1	31.8	36.1	40.3	35.5
14481	2009/04/01	12:09:48	36.9	36.0	35.5	35.7	41.3
14486	2009/04/01	12:10:03	37.7	37.4	32.5	31.9	31.6
14491	2009/04/01	12:10:18	31.4	32.4	34.6	36.5	36.1
14496	2009/04/01	12:10:33	36.6	37.0	38.2	34.7	38.1
14501	2009/04/01	12:10:48	37.5	38.5	35.7	31.6	31.1
14506	2009/04/01	12:11:03	32.2	33.5	34.3	38.5	33.8
14511	2009/04/01	12:11:18	37.4	31.6	31.8	37.7	36.8
14516	2009/04/01	12:11:33	40.3	37.2	35.2	37.6	39.8
14521	2009/04/01	12:11:48	40.9	40.7	38.0	37.9	37.1
14526	2009/04/01	12:12:03	34.2	33.1	33.1	36.4	38.5
14531	2009/04/01	12:12:18	36.0	38.0	36.5	35.5	35.9
14536	2009/04/01	12:12:33	38.9	32.3	32.2	32.4	32.7
14541	2009/04/01	12:12:48	32.5	32.2	32.5	34.1	38.1
14546	2009/04/01	12:13:03	37.1	31.6	31.5	32.7	37.2
14551	2009/04/01	12:13:18	35.0	34.8	38.1	37.7	36.6
14556	2009/04/01	12:13:33	34.9	35.6	42.8	38.6	35.6
14561	2009/04/01	12:13:48	38.1	38.7	39.9	39.2	37.8
14566	2009/04/01	12:14:03	39.5	38.4	36.2	37.2	41.9
14571	2009/04/01	12:14:18	41.9	37.5	41.2	40.7	38.9
14576	2009/04/01	12:14:33	39.7	42.6	43.2	39.5	37.8
14581	2009/04/01	12:14:48	36.3	36.0	41.0	36.4	36.0
14586	2009/04/01	12:15:03	33.2	34.9	33.4	35.6	37.1
14591	2009/04/01	12:15:18	39.7	43.9	44.4	50.6	54.2
14596	2009/04/01	12:15:33	58.2	59.4	57.9	66.0	72.4
14601	2009/04/01	12:15:48	60.8	52.1	47.8	42.9	44.1
14606	2009/04/01	12:16:03	45.1	41.5	40.7	42.9	37.2
14611	2009/04/01	12:16:18	38.8	37.1	36.8	40.5	40.6
14616	2009/04/01	12:16:33	37.7	40.2	39.8	37.1	40.0
14621	2009/04/01	12:16:48	35.6	36.6	31.6	36.8	37.1
14626	2009/04/01	12:17:03	37.0	39.9	36.9	42.5	46.1
14631	2009/04/01	12:17:18	49.6	50.0	57.7	76.8	60.7
14636	2009/04/01	12:17:33	51.9	46.2	44.3	41.8	36.8
14641	2009/04/01	12:17:48	34.3	32.2	32.1	31.9	33.4
14646	2009/04/01	12:18:03	35.2	37.0	32.3	31.6	32.0
14651	2009/04/01	12:18:18	31.6	32.0	31.4	36.4	38.6
14656	2009/04/01	12:18:33	39.3	35.7	37.0	33.9	34.3
14661	2009/04/01	12:18:48	33.5	34.5	35.2	34.8	36.8
14666	2009/04/01	12:19:03	36.7	38.1	41.8	41.7	40.7
14671	2009/04/01	12:19:18	40.2	38.8	39.1	37.4	35.3
14676	2009/04/01	12:19:33	41.0	41.0	42.7	38.9	38.3
14681	2009/04/01	12:19:48	40.8	42.1	43.3	42.1	39.7
14686	2009/04/01	12:20:03	40.9	40.0	39.0	40.3	38.8
14691	2009/04/01	12:20:18	37.0	36.2	36.8	39.1	39.4
14696	2009/04/01	12:20:33	40.4	41.4	41.6	38.9	38.7
14701	2009/04/01	12:20:48	40.3	34.9	32.4	31.9	31.8
14706	2009/04/01	12:21:03	32.2	33.0	35.1	36.8	37.2
14711	2009/04/01	12:21:18	35.4	32.4	32.3	31.4	31.6
14716	2009/04/01	12:21:33	31.8	40.7	34.0	32.1	31.8
14721	2009/04/01	12:21:48	31.5	37.1	37.8	34.3	37.3
14726	2009/04/01	12:22:03	35.5	38.2	37.9	36.9	37.4
14731	2009/04/01	12:22:18	37.5	39.4	35.8	38.6	40.1
14736	2009/04/01	12:22:33	36.6	37.0	33.8	38.9	39.7
14741	2009/04/01	12:22:48	38.1	37.3	36.5	31.6	31.4
14746	2009/04/01	12:23:03	31.8	31.5	31.6	31.2	31.9
14751	2009/04/01	12:23:18	32.1	32.1	31.5	32.3	31.9
14756	2009/04/01	12:23:33	31.9	31.7	31.6	32.0	31.4
14761	2009/04/01	12:23:48	31.9	34.1	32.1	38.9	34.7
14766	2009/04/01	12:24:03	33.1	32.3	33.3	33.4	33.2
14771	2009/04/01	12:24:18	32.8	33.5	33.4	34.4	35.5
14776	2009/04/01	12:24:33	39.6	43.5	49.6	48.5	58.1

14781	2009/04/01	12:24:48	77.7	60.2	50.7	46.5	46.5
14786	2009/04/01	12:25:03	45.1	39.5	40.3	40.2	37.8
14791	2009/04/01	12:25:18	38.2	34.1	38.4	38.2	43.0
14796	2009/04/01	12:25:33	42.2	39.9	41.0	38.2	40.1
14801	2009/04/01	12:25:48	38.6	39.4	41.7	37.4	38.4
14806	2009/04/01	12:26:03	37.4	40.0	38.3	39.3	36.6
14811	2009/04/01	12:26:18	36.7	34.8	36.4	34.4	34.3
14816	2009/04/01	12:26:33	32.4	32.2	32.0	31.9	31.8
14821	2009/04/01	12:26:48	31.5	32.2	31.5	32.0	31.3
14826	2009/04/01	12:27:03	31.3	31.5	32.3	31.6	32.1
14831	2009/04/01	12:27:18	31.8	31.8	32.6	36.1	37.1
14836	2009/04/01	12:27:33	34.9	35.0	36.5	34.8	39.4
14841	2009/04/01	12:27:48	40.0	43.4	48.6	53.3	56.7
14846	2009/04/01	12:28:03	58.6	72.0	57.6	52.2	51.0
14851	2009/04/01	12:28:18	51.3	60.5	75.6	60.7	52.9
14856	2009/04/01	12:28:33	47.1	43.2	43.2	37.5	35.2
14861	2009/04/01	12:28:48	33.0	32.3	32.4	31.9	31.7
14866	2009/04/01	12:29:03	36.7	35.2	36.6	39.6	38.1
14871	2009/04/01	12:29:18	40.8	37.2	36.7	36.7	41.5
14876	2009/04/01	12:29:33	41.5	36.3	39.4	33.4	34.1
14881	2009/04/01	12:29:48	33.3	36.0	31.9	31.8	31.8
14886	2009/04/01	12:30:03	31.3	32.0	33.9	34.5	36.0
14891	2009/04/01	12:30:18	32.3	34.1	34.5	39.1	34.3
14896	2009/04/01	12:30:33	35.6	38.5	39.4	39.4	41.2
14901	2009/04/01	12:30:48	34.0	33.4	38.2	37.7	37.2
14906	2009/04/01	12:31:03	37.2	36.8	39.0	35.9	41.6
14911	2009/04/01	12:31:18	46.9	59.2	59.8	72.7	69.7
14916	2009/04/01	12:31:33	56.6	49.3	52.0	46.9	38.9
14921	2009/04/01	12:31:48	35.9	35.8	38.4	36.1	31.7
14926	2009/04/01	12:32:03	34.5	31.2	31.7	32.1	41.6
14931	2009/04/01	12:32:18	33.8	31.6	32.4	34.2	31.3
14936	2009/04/01	12:32:33	31.6	31.0	33.1	35.5	34.5
14941	2009/04/01	12:32:48	39.4	37.8	38.2	40.7	43.2
14946	2009/04/01	12:33:03	35.0	32.7	32.3	32.1	35.9
14951	2009/04/01	12:33:18	32.1	31.8	31.4	34.7	31.6
14956	2009/04/01	12:33:33	31.4	32.4	31.4	31.3	32.7
14961	2009/04/01	12:33:48	31.7	31.6	36.3	37.4	40.3
14966	2009/04/01	12:34:03	41.9	36.3	33.3	32.8	33.1
14971	2009/04/01	12:34:18	34.4	36.6	41.8	41.0	38.4
14976	2009/04/01	12:34:33	39.1	36.9	37.4	37.3	40.3
14981	2009/04/01	12:34:48	36.3	38.4	41.3	37.8	31.7
14986	2009/04/01	12:35:03	35.0	36.3	38.5	40.2	41.9
14991	2009/04/01	12:35:18	36.9	36.5	35.8	34.5	34.9
14996	2009/04/01	12:35:33	33.1	36.4	38.4	37.5	38.9
15001	2009/04/01	12:35:48	38.8	38.0	37.4	38.4	37.8
15006	2009/04/01	12:36:03	38.5	38.2	38.1	38.3	36.8
15011	2009/04/01	12:36:18	38.0	35.1	33.8	34.9	33.9
15016	2009/04/01	12:36:33	34.5	35.1	32.4	33.0	34.1
15021	2009/04/01	12:36:48	32.9	36.0	41.3	45.9	58.7
15026	2009/04/01	12:37:03	61.4	66.3	58.6	47.7	46.3
15031	2009/04/01	12:37:18	40.6	39.9	40.1	41.3	38.6
15036	2009/04/01	12:37:33	37.2	37.0	37.6	35.4	32.7
15041	2009/04/01	12:37:48	32.0	31.9	32.5	32.1	32.6
15046	2009/04/01	12:38:03	35.1	36.0	41.0	35.9	43.4
15051	2009/04/01	12:38:18	46.4	51.5	51.7	59.0	73.2
15056	2009/04/01	12:38:33	61.0	55.3	48.3	46.0	47.4
15061	2009/04/01	12:38:48	43.2	37.3	33.6	32.6	31.8
15066	2009/04/01	12:39:03	31.8	33.6	33.5	35.7	35.2
15071	2009/04/01	12:39:18	35.0	39.9	39.8	39.7	36.8
15076	2009/04/01	12:39:33	41.3	39.7	41.1	43.5	35.3
15081	2009/04/01	12:39:48	38.1	36.6	31.4	32.1	31.5
15086	2009/04/01	12:40:03	31.8	31.8	33.4	36.1	31.9
15091	2009/04/01	12:40:18	35.9	41.9	39.2	39.1	41.3
15096	2009/04/01	12:40:33	32.1	35.2	38.8	40.8	39.1
15101	2009/04/01	12:40:48	35.8	39.3	38.3	35.7	35.5
15106	2009/04/01	12:41:03	34.9	33.3	35.2	36.5	35.4
15111	2009/04/01	12:41:18	37.3	37.3	36.4	37.2	37.9
15116	2009/04/01	12:41:33	36.2	38.1	38.0	38.5	36.3
15121	2009/04/01	12:41:48	39.0	34.4	32.9	32.4	31.4
15126	2009/04/01	12:42:03	31.3	31.4	34.7	35.0	36.4
15131	2009/04/01	12:42:18	32.6	33.1	31.7	31.6	31.5
15136	2009/04/01	12:42:33	32.0	32.5	33.2	39.4	33.2
15141	2009/04/01	12:42:48	31.6	32.2	31.5	31.8	31.8
15146	2009/04/01	12:43:03	31.6	32.0	32.6	34.9	32.1
15151	2009/04/01	12:43:18	34.3	31.8	32.1	32.2	32.1
15156	2009/04/01	12:43:33	32.1	31.7	32.1	31.7	32.1
15161	2009/04/01	12:43:48	32.6	34.9	34.7	38.7	35.7
15166	2009/04/01	12:44:03	36.9	35.2	40.9	38.4	35.4
15171	2009/04/01	12:44:18	32.4	32.7	36.5	36.4	37.6
15176	2009/04/01	12:44:33	39.9	41.1	35.7	38.7	38.4
15181	2009/04/01	12:44:48	40.4	37.3	42.0	40.6	38.4
15186	2009/04/01	12:45:03	40.3	42.1	43.7	51.4	48.7
15191	2009/04/01	12:45:18	59.5	72.9	55.1	49.4	42.0
15196	2009/04/01	12:45:33	43.1	38.9	34.3	33.2	32.0
15201	2009/04/01	12:45:48	32.1	31.8	31.5	32.8	33.1
15206	2009/04/01	12:46:03	36.1	31.8	31.7	32.0	31.8
15211	2009/04/01	12:46:18	32.7	31.8	31.6	34.3	35.2
15216	2009/04/01	12:46:33	35.7	31.8	32.2	31.5	34.2
15221	2009/04/01	12:46:48	38.1	33.9	34.3	38.5	38.5
15226	2009/04/01	12:47:03	38.6	39.4	41.0	41.4	40.8
15231	2009/04/01	12:47:18	40.8	31.9	36.9	38.1	41.2
15236	2009/04/01	12:47:33	39.1	36.3	40.4	41.0	38.9
15241	2009/04/01	12:47:48	41.6	41.3	39.0	39.9	39.1
15246	2009/04/01	12:48:03	39.1	38.1	39.7	41.5	40.6
15251	2009/04/01	12:48:18	38.0	37.4	40.1	40.2	39.8
15256	2009/04/01	12:48:33	38.6	39.0	37.2	35.8	37.6
15261	2009/04/01	12:48:48	36.9	39.7	39.1	37.7	41.6
15266	2009/04/01	12:49:03	41.9	38.7	35.8	33.0	40.0
15271	2009/04/01	12:49:18	34.6	35.7	40.7	38.7	37.6

15276	2009/04/01	12:49:33	34.9	35.0	32.3	38.2	36.6
15281	2009/04/01	12:49:48	37.4	41.9	38.8	37.9	35.8
15286	2009/04/01	12:50:03	37.9	41.3	39.1	40.5	39.7
15291	2009/04/01	12:50:18	40.8	42.9	40.2	36.0	39.5
15296	2009/04/01	12:50:33	38.4	36.1	39.0	38.6	35.8
15301	2009/04/01	12:50:48	34.3	31.9	32.4	32.8	32.4
15306	2009/04/01	12:51:03	38.3	40.1	49.0	51.0	58.1
15311	2009/04/01	12:51:18	75.4	55.7	50.9	44.3	45.0
15316	2009/04/01	12:51:33	38.1	33.7	33.6	32.5	32.5
15321	2009/04/01	12:51:48	31.6	31.8	32.1	32.0	31.8
15326	2009/04/01	12:52:03	31.9	31.6	31.6	31.6	32.0
15331	2009/04/01	12:52:18	31.6	32.0	33.3	39.3	40.2
15336	2009/04/01	12:52:33	44.0	55.7	59.5	72.0	60.8
15341	2009/04/01	12:52:48	56.9	51.4	44.7	42.7	39.2
15346	2009/04/01	12:53:03	31.9	34.1	34.3	39.6	42.1
15351	2009/04/01	12:53:18	42.2	40.7	39.4	39.0	37.8
15356	2009/04/01	12:53:33	36.9	38.6	36.2	41.2	38.7
15361	2009/04/01	12:53:48	41.1	38.6	40.6	37.6	42.4
15366	2009/04/01	12:54:03	37.9	37.9	32.0	32.8	35.1
15371	2009/04/01	12:54:18	38.1	36.9	39.9	40.4	35.7
15376	2009/04/01	12:54:33	33.9	33.0	34.8	38.3	43.8
15381	2009/04/01	12:54:48	37.5	36.3	34.7	32.2	32.1
15386	2009/04/01	12:55:03	32.6	33.3	35.3	38.8	38.4
15391	2009/04/01	12:55:18	34.2	33.6	32.5	32.2	33.9
15396	2009/04/01	12:55:33	31.9	31.8	31.9	32.6	32.3
15401	2009/04/01	12:55:48	37.8	35.9	37.8	35.5	38.6
15406	2009/04/01	12:56:03	34.7	35.7	37.8	37.4	38.1
15411	2009/04/01	12:56:18	39.4	40.8	34.5	32.1	32.6
15416	2009/04/01	12:56:33	33.0	32.7	33.9	31.7	32.3
15421	2009/04/01	12:56:48	32.2	32.4	32.5	32.5	33.1
15426	2009/04/01	12:57:03	32.3	31.9	32.4	34.4	40.2
15431	2009/04/01	12:57:18	42.3	43.6	40.5	38.3	40.9
15436	2009/04/01	12:57:33	38.9	37.7	42.2	38.5	39.7
15441	2009/04/01	12:57:48	36.7	39.9	41.2	41.1	43.2
15446	2009/04/01	12:58:03	38.7	39.9	36.9	39.1	36.9
15451	2009/04/01	12:58:18	41.0	35.9	38.1	44.3	54.5
15456	2009/04/01	12:58:33	64.5	77.5	63.8	60.8	50.9
15461	2009/04/01	12:58:48	45.7	44.8	40.6	36.0	36.7
15466	2009/04/01	12:59:03	38.4	42.0	36.6	37.0	40.4
15471	2009/04/01	12:59:18	37.7	38.5	40.2	40.0	37.1
15476	2009/04/01	12:59:33	36.8	36.7	40.7	39.3	41.2
15481	2009/04/01	12:59:48	38.3	32.2	32.2	32.6	33.4
15486	2009/04/01	13:00:03	32.2	32.6	32.5	34.9	39.0
15491	2009/04/01	13:00:18	36.2	37.3	32.6	32.5	34.7
15496	2009/04/01	13:00:33	32.3	32.4	34.1	32.5	32.1
15501	2009/04/01	13:00:48	32.5	32.7	32.8	37.8	36.8
15506	2009/04/01	13:01:03	37.4	37.8	36.1	39.9	44.1
15511	2009/04/01	13:01:18	43.8	46.6	53.8	55.7	63.9
15516	2009/04/01	13:01:33	69.4	53.8	49.8	47.4	48.8
15521	2009/04/01	13:01:48	41.6	38.4	36.5	35.1	38.6
15526	2009/04/01	13:02:03	40.2	40.2	39.7	41.7	41.6
15531	2009/04/01	13:02:18	39.0	38.0	39.8	39.4	40.2
15536	2009/04/01	13:02:33	40.1	40.1	38.5	40.3	39.0
15541	2009/04/01	13:02:48	38.4	34.6	33.2	34.4	33.7
15546	2009/04/01	13:03:03	33.2	34.2	35.4	38.0	35.3
15551	2009/04/01	13:03:18	32.3	34.5	37.4	40.8	32.0
15556	2009/04/01	13:03:33	31.6	32.1	32.0	32.6	38.3
15561	2009/04/01	13:03:48	36.4	37.7	39.1	36.9	36.3
15566	2009/04/01	13:04:03	38.4	38.6	35.1	39.3	34.4
15571	2009/04/01	13:04:18	37.9	34.4	39.2	38.7	37.5
15576	2009/04/01	13:04:33	35.5	37.9	38.8	40.8	38.5
15581	2009/04/01	13:04:48	39.6	38.8	37.6	36.8	36.8
15586	2009/04/01	13:05:03	33.5	31.7	32.5	32.3	32.0
15591	2009/04/01	13:05:18	32.5	31.8	32.4	37.2	37.2
15596	2009/04/01	13:05:33	33.9	40.1	36.4	36.4	35.7
15601	2009/04/01	13:05:48	39.6	31.3	32.4	35.1	34.9
15606	2009/04/01	13:06:03	38.7	35.4	33.4	34.2	38.5
15611	2009/04/01	13:06:18	39.4	41.6	35.3	41.6	36.5
15616	2009/04/01	13:06:33	39.6	39.8	40.3	39.6	41.6
15621	2009/04/01	13:06:48	41.2	39.4	41.3	41.6	38.8
15626	2009/04/01	13:07:03	36.8	40.8	42.8	40.2	41.8
15631	2009/04/01	13:07:18	38.1	42.4	39.7	38.9	33.8
15636	2009/04/01	13:07:33	33.9	34.1	34.0	34.6	38.4
15641	2009/04/01	13:07:48	36.0	37.6	39.3	36.5	35.2
15646	2009/04/01	13:08:03	36.3	35.3	33.8	35.7	33.5
15651	2009/04/01	13:08:18	31.6	31.9	32.0	33.2	34.6
15656	2009/04/01	13:08:33	34.7	37.5	35.2	34.4	31.8
15661	2009/04/01	13:08:48	31.6	31.9	31.5	32.2	32.1
15666	2009/04/01	13:09:03	32.2	31.8	31.8	36.2	39.1
15671	2009/04/01	13:09:18	32.3	32.4	32.3	31.8	31.9
15676	2009/04/01	13:09:33	31.7	32.8	32.7	34.1	37.3
15681	2009/04/01	13:09:48	34.1	35.4	39.4	39.1	37.9
15686	2009/04/01	13:10:03	35.1	37.9	36.1	39.3	40.1
15691	2009/04/01	13:10:18	37.6	40.1	41.7	38.2	40.5
15696	2009/04/01	13:10:33	39.7	41.1	40.5	41.1	39.8
15701	2009/04/01	13:10:48	38.4	42.3	40.9	39.7	38.8
15706	2009/04/01	13:11:03	39.5	41.3	37.5	35.7	38.9
15711	2009/04/01	13:11:18	37.2	37.6	39.6	33.2	37.0
15716	2009/04/01	13:11:33	41.1	40.2	41.1	40.4	39.6
15721	2009/04/01	13:11:48	41.2	44.8	49.0	49.4	53.8
15726	2009/04/01	13:12:03	59.6	69.5	53.9	46.6	44.6
15731	2009/04/01	13:12:18	41.3	45.1	45.6	41.0	36.6
15736	2009/04/01	13:12:33	40.7	39.3	41.0	42.6	41.3
15741	2009/04/01	13:12:48	40.9	41.1	40.6	40.1	38.3
15746	2009/04/01	13:13:03	34.3	34.3	33.2	34.4	36.2
15751	2009/04/01	13:13:18	32.6	35.9	34.4	35.9	41.7
15756	2009/04/01	13:13:33	36.8	41.2	39.2	37.0	35.3
15761	2009/04/01	13:13:48	33.4	38.3	38.0	38.9	40.7
15766	2009/04/01	13:14:03	41.0	42.0	52.1	57.4	70.3

15771	2009/04/01	13:14:18	67.2	53.1	52.7	49.2	41.5
15776	2009/04/01	13:14:33	40.6	38.4	39.6	47.8	36.1
15781	2009/04/01	13:14:48	35.6	36.9	36.5	32.6	32.4
15786	2009/04/01	13:15:03	32.2	31.9	31.9	32.2	32.5
15791	2009/04/01	13:15:18	34.2	37.3	32.9	33.4	35.4
15796	2009/04/01	13:15:33	41.4	34.1	39.0	37.0	39.5
15801	2009/04/01	13:15:48	39.0	33.8	35.1	38.1	39.0
15806	2009/04/01	13:16:03	37.6	32.9	33.9	36.9	37.3
15811	2009/04/01	13:16:18	40.6	41.1	38.1	37.7	39.2
15816	2009/04/01	13:16:33	40.5	39.4	40.6	33.0	32.8
15821	2009/04/01	13:16:48	32.8	37.6	38.9	40.7	42.1
15826	2009/04/01	13:17:03	37.7	39.1	43.7	40.5	39.1
15831	2009/04/01	13:17:18	39.0	44.2	40.9	39.2	37.0
15836	2009/04/01	13:17:33	34.0	37.5	38.3	36.0	36.1
15841	2009/04/01	13:17:48	38.2	41.9	40.3	34.5	37.8
15846	2009/04/01	13:18:03	40.2	37.6	39.2	37.7	35.9
15851	2009/04/01	13:18:18	36.5	37.2	32.1	33.8	32.1
15856	2009/04/01	13:18:33	31.9	33.4	37.6	38.6	36.8
15861	2009/04/01	13:18:48	33.0	36.7	31.7	32.1	32.4
15866	2009/04/01	13:19:03	32.3	34.9	32.9	33.2	38.2
15871	2009/04/01	13:19:18	34.2	38.8	35.4	34.8	37.2
15876	2009/04/01	13:19:33	37.2	39.4	37.8	37.7	41.9
15881	2009/04/01	13:19:48	41.3	35.5	37.7	40.4	34.7
15886	2009/04/01	13:20:03	35.5	40.6	41.1	37.2	34.9
15891	2009/04/01	13:20:18	34.5	33.6	38.8	38.6	38.3
15896	2009/04/01	13:20:33	37.3	40.8	33.2	38.5	37.5
15901	2009/04/01	13:20:48	36.3	42.1	33.9	37.0	37.7
15906	2009/04/01	13:21:03	36.0	37.6	38.1	42.4	39.7
15911	2009/04/01	13:21:18	39.1	37.4	38.8	37.4	34.9
15916	2009/04/01	13:21:33	38.3	36.0	31.9	31.9	31.9
15921	2009/04/01	13:21:48	32.0	31.9	32.7	37.1	32.1
15926	2009/04/01	13:22:03	31.9	32.9	40.4	34.3	36.3
15931	2009/04/01	13:22:18	37.0	39.4	39.5	39.4	39.6
15936	2009/04/01	13:22:33	39.9	42.2	39.9	37.7	33.5
15941	2009/04/01	13:22:48	36.4	32.2	34.6	32.6	34.7
15946	2009/04/01	13:23:03	32.1	32.3	31.8	33.5	37.9
15951	2009/04/01	13:23:18	35.4	35.0	34.9	33.8	32.1
15956	2009/04/01	13:23:33	31.8	31.6	32.1	32.3	31.6
15961	2009/04/01	13:23:48	32.5	32.7	35.8	37.5	39.0
15966	2009/04/01	13:24:03	35.9	36.4	33.8	35.0	32.7
15971	2009/04/01	13:24:18	32.7	37.3	36.1	35.7	35.1
15976	2009/04/01	13:24:33	36.5	36.0	39.2	34.9	39.6
15981	2009/04/01	13:24:48	35.2	38.5	40.2	37.3	37.2
15986	2009/04/01	13:25:03	36.6	39.6	38.3	41.1	40.4
15991	2009/04/01	13:25:18	37.3	37.8	38.4	36.7	38.7
15996	2009/04/01	13:25:33	35.6	36.7	32.4	32.4	32.2
16001	2009/04/01	13:25:48	31.9	32.3	32.1	32.2	32.6
16006	2009/04/01	13:26:03	32.1	32.0	32.0	32.7	32.3
16011	2009/04/01	13:26:18	32.6	32.4	33.2	32.8	32.8
16016	2009/04/01	13:26:33	36.5	34.2	36.1	35.0	34.9
16021	2009/04/01	13:26:48	35.8	38.4	38.8	40.7	39.6
16026	2009/04/01	13:27:03	37.7	35.4	36.3	34.2	37.2
16031	2009/04/01	13:27:18	37.4	37.2	38.0	33.8	34.3
16036	2009/04/01	13:27:33	36.7	41.2	38.8	37.9	40.5
16041	2009/04/01	13:27:48	38.6	35.3	38.8	34.0	36.4
16046	2009/04/01	13:28:03	36.3	40.1	38.1	35.6	34.5
16051	2009/04/01	13:28:18	33.3	32.8	33.5	34.0	34.9
16056	2009/04/01	13:28:33	33.1	32.5	32.8	32.4	32.0
16061	2009/04/01	13:28:48	32.6	32.4	35.7	33.5	36.0
16066	2009/04/01	13:29:03	32.9	34.1	34.5	32.9	33.2
16071	2009/04/01	13:29:18	33.0	34.2	34.0	36.9	37.8
16076	2009/04/01	13:29:33	36.2	36.4	38.8	39.3	37.0
16081	2009/04/01	13:29:48	38.0	40.7	35.9	37.5	38.5
16086	2009/04/01	13:30:03	40.2	33.2	33.0	32.4	32.5
16091	2009/04/01	13:30:18	35.9	35.6	34.1	36.8	37.1
16096	2009/04/01	13:30:33	42.8	51.9	49.8	54.5	69.8
16101	2009/04/01	13:30:48	68.4	57.6	50.2	47.2	42.9
16106	2009/04/01	13:31:03	44.2	36.7	38.1	36.7	37.2
16111	2009/04/01	13:31:18	36.5	35.8	40.9	37.5	38.3
16116	2009/04/01	13:31:33	38.7	42.7	40.9	39.8	45.4
16121	2009/04/01	13:31:48	58.0	64.8	57.3	49.1	47.9
16126	2009/04/01	13:32:03	44.7	41.6	42.5	36.4	33.8
16131	2009/04/01	13:32:18	35.7	36.0	36.6	36.5	38.9
16136	2009/04/01	13:32:33	38.0	38.7	38.7	40.3	40.8
16141	2009/04/01	13:32:48	36.9	39.3	41.0	39.3	37.2
16146	2009/04/01	13:33:03	37.0	39.4	39.0	40.8	35.9
16151	2009/04/01	13:33:18	36.5	36.7	34.5	43.9	34.1
16156	2009/04/01	13:33:33	33.7	32.4	32.4	32.3	33.6
16161	2009/04/01	13:33:48	32.0	32.1	32.2	32.4	32.3
16166	2009/04/01	13:34:03	33.4	36.9	35.4	34.5	37.0
16171	2009/04/01	13:34:18	33.8	37.0	33.9	34.2	34.3
16176	2009/04/01	13:34:33	33.0	36.2	37.6	39.2	40.4
16181	2009/04/01	13:34:48	46.0	55.4	59.6	70.5	74.9
16186	2009/04/01	13:35:03	63.7	54.7	56.5	54.6	51.1
16191	2009/04/01	13:35:18	47.0	44.6	38.8	33.2	32.9
16196	2009/04/01	13:35:33	33.3	33.2	31.7	32.9	32.4
16201	2009/04/01	13:35:48	32.8	33.7	34.8	33.1	32.8
16206	2009/04/01	13:36:03	34.0	33.7	35.5	41.2	40.3
16211	2009/04/01	13:36:18	38.4	37.7	39.7	42.4	42.7
16216	2009/04/01	13:36:33	42.8	42.9	44.3	43.9	45.0
16221	2009/04/01	13:36:48	54.0	52.5	56.5	79.7	62.7
16226	2009/04/01	13:37:03	53.7	47.2	45.0	47.5	39.0
16231	2009/04/01	13:37:18	41.0	42.1	38.9	36.1	37.0
16236	2009/04/01	13:37:33	36.9	37.8	40.3	44.1	51.6
16241	2009/04/01	13:37:48	57.8	60.4	71.0	62.1	52.0
16246	2009/04/01	13:38:03	52.9	45.8	38.8	37.6	34.0
16251	2009/04/01	13:38:18	33.9	36.3	34.3	33.8	34.7
16256	2009/04/01	13:38:33	37.6	36.7	32.6	32.9	32.7
16261	2009/04/01	13:38:48	32.6	32.8	32.4	32.2	32.9

16266	2009/04/01	13:39:03	35.3	35.2	35.8	44.6	50.1
16271	2009/04/01	13:39:18	48.6	57.7	71.5	54.9	54.0
16276	2009/04/01	13:39:33	46.9	45.8	43.2	37.8	37.2
16281	2009/04/01	13:39:48	38.4	37.1	39.2	32.4	35.0
16286	2009/04/01	13:40:03	35.6	38.7	32.9	34.7	39.7
16291	2009/04/01	13:40:18	35.3	39.8	34.2	33.4	35.5
16296	2009/04/01	13:40:33	37.2	33.5	33.7	32.1	39.9
16301	2009/04/01	13:40:48	32.2	41.8	32.2	32.0	36.6
16306	2009/04/01	13:41:03	32.6	31.9	32.4	32.4	32.6
16311	2009/04/01	13:41:18	32.4	32.9	32.5	36.3	32.6
16316	2009/04/01	13:41:33	34.4	34.2	33.5	36.5	34.6
16321	2009/04/01	13:41:48	41.6	40.9	33.3	34.4	36.3
16326	2009/04/01	13:42:03	37.0	36.5	37.1	37.0	39.1
16331	2009/04/01	13:42:18	41.6	41.3	38.8	36.8	36.9
16336	2009/04/01	13:42:33	37.7	41.2	39.6	40.8	40.6
16341	2009/04/01	13:42:48	38.6	40.2	40.3	41.9	37.4
16346	2009/04/01	13:43:03	33.4	32.1	32.1	32.5	32.2
16351	2009/04/01	13:43:18	32.5	34.9	33.5	39.3	35.3
16356	2009/04/01	13:43:33	36.1	34.9	32.3	31.8	32.3
16361	2009/04/01	13:43:48	31.7	33.0	35.9	34.8	35.6
16366	2009/04/01	13:44:03	37.9	34.5	40.0	32.1	36.4
16371	2009/04/01	13:44:18	35.6	40.8	32.5	34.1	35.6
16376	2009/04/01	13:44:33	41.4	34.9	31.6	32.3	37.5
16381	2009/04/01	13:44:48	32.5	32.0	32.3	32.0	31.8
16386	2009/04/01	13:45:03	31.9	31.9	32.3	32.0	31.7
16391	2009/04/01	13:45:18	33.9	35.0	32.6	37.0	33.1
16396	2009/04/01	13:45:33	32.8	32.1	32.6	33.5	32.0
16401	2009/04/01	13:45:48	35.0	32.0	32.6	31.8	31.7
16406	2009/04/01	13:46:03	33.6	35.4	33.0	32.5	32.5
16411	2009/04/01	13:46:18	31.9	32.6	32.7	32.3	32.5
16416	2009/04/01	13:46:33	32.3	32.9	31.8	32.5	32.7
16421	2009/04/01	13:46:48	33.6	32.3	33.2	32.1	36.9
16426	2009/04/01	13:47:03	32.5	32.4	32.3	32.4	32.2
16431	2009/04/01	13:47:18	32.2	32.2	33.1	32.8	34.4
16436	2009/04/01	13:47:33	33.5	33.5	33.2	37.2	39.5
16441	2009/04/01	13:47:48	38.6	33.7	32.6	33.1	32.0
16446	2009/04/01	13:48:03	32.3	32.6	33.0	36.1	34.3
16451	2009/04/01	13:48:18	36.7	35.6	32.1	32.0	32.4
16456	2009/04/01	13:48:33	31.9	32.4	32.4	32.8	32.1
16461	2009/04/01	13:48:48	31.9	32.0	31.5	32.2	32.2
16466	2009/04/01	13:49:03	32.2	34.9	35.6	35.2	38.0
16471	2009/04/01	13:49:18	36.0	36.9	36.4	36.8	38.7
16476	2009/04/01	13:49:33	37.0	37.4	40.8	33.2	32.2
16481	2009/04/01	13:49:48	32.3	32.1	37.9	34.3	38.5
16486	2009/04/01	13:50:03	35.3	35.6	33.5	33.6	35.8
16491	2009/04/01	13:50:18	36.2	41.4	33.0	33.9	33.7
16496	2009/04/01	13:50:33	37.5	36.8	37.4	32.0	35.5
16501	2009/04/01	13:50:48	34.6	32.6	34.6	32.9	32.2
16506	2009/04/01	13:51:03	33.0	32.4	32.5	31.8	36.7
16511	2009/04/01	13:51:18	32.1	32.1	32.1	33.2	32.9
16516	2009/04/01	13:51:33	35.1	32.2	32.6	32.3	32.4
16521	2009/04/01	13:51:48	34.1	34.7	32.5	32.0	32.1
16526	2009/04/01	13:52:03	32.4	35.4	32.5	32.6	32.0
16531	2009/04/01	13:52:18	32.3	32.0	32.9	31.9	32.0
16536	2009/04/01	13:52:33	32.7	32.7	32.0	33.4	32.6
16541	2009/04/01	13:52:48	34.5	37.1	40.2	34.0	38.0
16546	2009/04/01	13:53:03	39.3	38.1	33.9	39.6	40.1
16551	2009/04/01	13:53:18	35.5	41.2	39.4	41.2	38.4
16556	2009/04/01	13:53:33	36.0	41.5	38.9	43.3	40.5
16561	2009/04/01	13:53:48	43.2	39.4	32.2	32.6	32.1
16566	2009/04/01	13:54:03	31.9	32.3	32.4	33.5	38.5
16571	2009/04/01	13:54:18	35.2	32.2	32.2	32.4	32.4
16576	2009/04/01	13:54:33	31.9	32.4	32.3	32.2	32.3
16581	2009/04/01	13:54:48	32.5	32.1	32.1	31.8	32.4
16586	2009/04/01	13:55:03	31.8	32.5	32.4	32.2	33.3
16591	2009/04/01	13:55:18	33.4	33.3	33.8	31.9	35.4
16596	2009/04/01	13:55:33	34.2	39.5	37.2	33.4	35.4
16601	2009/04/01	13:55:48	34.6	35.0	36.8	32.6	33.1
16606	2009/04/01	13:56:03	32.6	32.4	32.8	37.4	35.9
16611	2009/04/01	13:56:18	35.5	34.9	37.8	32.1	32.7
16616	2009/04/01	13:56:33	32.2	32.4	32.0	35.8	37.6
16621	2009/04/01	13:56:48	36.8	39.1	37.5	38.5	34.6
16626	2009/04/01	13:57:03	35.2	33.6	32.7	37.9	33.1
16631	2009/04/01	13:57:18	33.7	32.9	32.1	32.8	32.6
16636	2009/04/01	13:57:33	34.8	32.8	33.9	33.9	40.2
16641	2009/04/01	13:57:48	34.4	33.3	33.4	33.6	35.5
16646	2009/04/01	13:58:03	35.4	34.5	34.0	34.3	33.9
16651	2009/04/01	13:58:18	35.3	35.6	34.9	36.9	33.8
16656	2009/04/01	13:58:33	32.5	33.0	32.1	32.2	33.0
16661	2009/04/01	13:58:48	34.0	32.6	32.4	32.7	35.0
16666	2009/04/01	13:59:03	32.4	36.6	32.4	35.1	32.7
16671	2009/04/01	13:59:18	32.5	32.3	32.5	32.9	33.5
16676	2009/04/01	13:59:33	32.6	33.7	33.5	32.9	33.9
16681	2009/04/01	13:59:48	32.2	33.5	32.0	32.3	32.4
16686	2009/04/01	14:00:03	35.1	35.0	33.7	32.3	33.0
16691	2009/04/01	14:00:18	36.1	38.2	37.5	35.2	36.3
16696	2009/04/01	14:00:33	38.5	38.7	39.6	35.8	38.0
16701	2009/04/01	14:00:48	37.5	32.8	32.6	34.4	36.3
16706	2009/04/01	14:01:03	34.9	34.0	32.8	32.6	32.4
16711	2009/04/01	14:01:18	32.9	34.7	32.5	32.7	33.1
16716	2009/04/01	14:01:33	32.0	32.6	34.8	35.7	33.5
16721	2009/04/01	14:01:48	33.4	32.4	32.4	32.4	32.6
16726	2009/04/01	14:02:03	34.0	35.7	37.0	40.1	40.2
16731	2009/04/01	14:02:18	40.1	37.1	38.7	41.4	38.1
16736	2009/04/01	14:02:33	38.9	40.6	39.2	38.7	39.0
16741	2009/04/01	14:02:48	38.6	41.9	39.8	37.5	32.7
16746	2009/04/01	14:03:03	33.5	32.2	32.7	33.0	32.3
16751	2009/04/01	14:03:18	32.4	33.2	38.7	38.8	38.5
16756	2009/04/01	14:03:33	36.9	40.8	38.4	38.9	34.1

16761	2009/04/01	14:03:48	36.3	37.4	40.1	39.8	39.2
16766	2009/04/01	14:04:03	37.1	38.1	36.1	40.2	41.2
16771	2009/04/01	14:04:18	41.7	35.1	35.0	34.5	35.8
16776	2009/04/01	14:04:33	37.8	38.7	40.9	42.1	38.4
16781	2009/04/01	14:04:48	39.4	41.1	40.2	40.5	39.4
16786	2009/04/01	14:05:03	39.2	37.9	39.1	38.9	39.2
16791	2009/04/01	14:05:18	37.9	40.5	40.5	40.5	40.3
16796	2009/04/01	14:05:33	38.6	39.6	38.3	37.5	36.7
16801	2009/04/01	14:05:48	35.7	40.2	37.0	40.9	40.5
16806	2009/04/01	14:06:03	37.9	37.9	37.6	38.2	39.5
16811	2009/04/01	14:06:18	38.6	38.5	34.9	38.7	36.6
16816	2009/04/01	14:06:33	37.7	32.5	33.2	32.6	33.1
16821	2009/04/01	14:06:48	32.8	32.4	32.5	32.3	32.8
16826	2009/04/01	14:07:03	33.5	32.0	32.2	31.9	32.4
16831	2009/04/01	14:07:18	32.7	32.5	33.6	37.6	35.0
16836	2009/04/01	14:07:33	36.5	37.2	32.4	33.0	32.7
16841	2009/04/01	14:07:48	32.1	33.2	34.2	38.1	33.7
16846	2009/04/01	14:08:03	36.3	36.6	39.2	36.4	35.6
16851	2009/04/01	14:08:18	39.8	33.7	35.9	37.8	32.6
16856	2009/04/01	14:08:33	33.8	36.5	45.7	54.2	52.4
16861	2009/04/01	14:08:48	61.8	74.0	56.8	57.7	46.7
16866	2009/04/01	14:09:03	46.9	42.1	36.2	33.3	32.9
16871	2009/04/01	14:09:18	33.7	32.0	32.6	32.5	32.6
16876	2009/04/01	14:09:33	32.6	32.4	32.5	32.5	33.7
16881	2009/04/01	14:09:48	33.2	33.4	33.0	32.2	32.0
16886	2009/04/01	14:10:03	32.8	33.2	32.9	32.6	34.3
16891	2009/04/01	14:10:18	32.1	33.0	33.1	32.2	33.3
16896	2009/04/01	14:10:33	38.9	37.1	35.8	34.5	36.7
16901	2009/04/01	14:10:48	34.8	37.2	36.8	39.2	37.4
16906	2009/04/01	14:11:03	38.3	37.1	35.1	38.4	35.8
16911	2009/04/01	14:11:18	33.9	35.0	36.5	35.0	34.5
16916	2009/04/01	14:11:33	33.0	38.6	37.2	38.8	35.3
16921	2009/04/01	14:11:48	36.0	37.1	39.9	39.5	37.5
16926	2009/04/01	14:12:03	38.4	40.9	39.6	42.1	39.3
16931	2009/04/01	14:12:18	40.3	42.4	40.0	37.6	38.1
16936	2009/04/01	14:12:33	40.4	39.3	39.3	38.2	37.4
16941	2009/04/01	14:12:48	37.7	38.9	39.0	37.2	36.2
16946	2009/04/01	14:13:03	36.4	35.8	36.1	37.5	44.4
16951	2009/04/01	14:13:18	37.7	39.4	36.1	36.7	36.2
16956	2009/04/01	14:13:33	34.2	33.2	34.9	32.9	32.7
16961	2009/04/01	14:13:48	32.9	32.6	32.5	32.6	36.2
16966	2009/04/01	14:14:03	37.4	38.1	35.8	35.0	37.6
16971	2009/04/01	14:14:18	35.3	35.8	33.0	32.9	32.9
16976	2009/04/01	14:14:33	32.6	32.6	33.9	36.8	40.6
16981	2009/04/01	14:14:48	35.2	37.3	40.3	39.1	40.9
16986	2009/04/01	14:15:03	38.9	39.2	38.0	38.2	36.9
16991	2009/04/01	14:15:18	35.1	37.5	36.7	36.5	36.8
16996	2009/04/01	14:15:33	33.4	33.2	33.0	32.5	34.3
17001	2009/04/01	14:15:48	33.3	36.1	32.7	33.0	34.7
17006	2009/04/01	14:16:03	33.2	33.6	32.8	35.6	38.2
17011	2009/04/01	14:16:18	35.1	35.0	34.9	37.8	37.0
17016	2009/04/01	14:16:33	39.2	36.3	32.0	32.7	32.7
17021	2009/04/01	14:16:48	32.4	33.9	35.6	35.6	38.0
17026	2009/04/01	14:17:03	40.4	35.5	38.7	37.4	38.8
17031	2009/04/01	14:17:18	39.1	36.7	38.9	38.4	38.3
17036	2009/04/01	14:17:33	35.8	37.3	38.1	35.6	35.3
17041	2009/04/01	14:17:48	37.4	38.2	38.0	34.8	35.4
17046	2009/04/01	14:18:03	33.4	36.6	39.2	39.5	38.4
17051	2009/04/01	14:18:18	35.9	39.3	37.8	36.9	38.0
17056	2009/04/01	14:18:33	40.8	41.3	39.8	39.9	33.6
17061	2009/04/01	14:18:48	32.6	32.6	32.5	32.5	32.8
17066	2009/04/01	14:19:03	33.4	35.0	35.6	36.8	35.3
17071	2009/04/01	14:19:18	35.7	38.7	39.2	37.1	38.9
17076	2009/04/01	14:19:33	48.4	37.2	38.8	37.3	41.6
17081	2009/04/01	14:19:48	38.9	36.6	36.6	36.9	33.9
17086	2009/04/01	14:20:03	35.5	38.8	37.7	36.2	34.2
17091	2009/04/01	14:20:18	36.7	35.9	39.0	38.1	35.0
17096	2009/04/01	14:20:33	39.4	38.7	37.2	36.0	35.5
17101	2009/04/01	14:20:48	35.3	36.1	34.8	33.9	39.5
17106	2009/04/01	14:21:03	34.0	37.7	38.3	34.9	37.6
17111	2009/04/01	14:21:18	39.2	38.7	34.1	33.8	33.5
17116	2009/04/01	14:21:33	38.8	37.6	34.0	33.4	37.1
17121	2009/04/01	14:21:48	33.5	35.0	35.0	37.6	35.8
17126	2009/04/01	14:22:03	35.9	39.2	39.2	39.5	38.2
17131	2009/04/01	14:22:18	38.0	32.8	41.1	34.1	32.8
17136	2009/04/01	14:22:33	33.4	32.9	33.1	34.9	33.0
17141	2009/04/01	14:22:48	37.0	34.0	37.4	35.7	39.4
17146	2009/04/01	14:23:03	39.0	39.5	38.1	40.9	37.8
17151	2009/04/01	14:23:18	38.0	37.0	37.6	35.9	32.7
17156	2009/04/01	14:23:33	33.2	37.1	36.6	38.4	40.7
17161	2009/04/01	14:23:48	40.4	38.5	41.3	37.3	36.1
17166	2009/04/01	14:24:03	40.1	36.6	37.1	36.3	38.9
17171	2009/04/01	14:24:18	37.8	37.1	36.7	37.3	36.7
17176	2009/04/01	14:24:33	41.3	37.7	41.1	39.4	36.4
17181	2009/04/01	14:24:48	39.1	37.8	34.8	37.4	37.9
17186	2009/04/01	14:25:03	40.2	41.3	47.6	50.9	53.1
17191	2009/04/01	14:25:18	52.1	56.5	66.3	77.8	73.5
17196	2009/04/01	14:25:33	64.9	60.3	54.9	52.3	46.3
17201	2009/04/01	14:25:48	45.1	46.1	43.9	40.0	38.2
17206	2009/04/01	14:26:03	38.8	38.5	38.1	36.2	39.3
17211	2009/04/01	14:26:18	38.9	38.9	36.7	37.2	35.7
17216	2009/04/01	14:26:33	34.8	34.4	34.4	34.6	37.5
17221	2009/04/01	14:26:48	35.1	34.8	34.8	38.4	35.9
17226	2009/04/01	14:27:03	37.6	39.0	37.1	40.3	38.7
17231	2009/04/01	14:27:18	39.1	40.0	39.4	41.5	42.6
17236	2009/04/01	14:27:33	45.0	39.8	39.8	41.9	46.0
17241	2009/04/01	14:27:48	47.7	45.0	48.6	46.4	42.3
17246	2009/04/01	14:28:03	37.1	39.8	41.4	43.8	42.0
17251	2009/04/01	14:28:18	43.2	41.0	41.1	41.6	40.2

17256	2009/04/01	14:28:33	39.6	40.7	39.1	43.6	39.6
17261	2009/04/01	14:28:48	36.6	37.0	38.0	37.4	36.1
17266	2009/04/01	14:29:03	35.6	35.6	36.0	35.3	34.4
17271	2009/04/01	14:29:18	35.2	35.5	34.7	36.3	35.4
17276	2009/04/01	14:29:33	38.4	37.5	39.1	37.0	39.8
17281	2009/04/01	14:29:48	33.4	36.3	39.4	40.6	36.6
17286	2009/04/01	14:30:03	35.0	36.8	39.1	42.0	39.8
17291	2009/04/01	14:30:18	39.6	37.9	41.2	40.0	38.9
17296	2009/04/01	14:30:33	36.4	35.1	33.4	34.7	33.9
17301	2009/04/01	14:30:48	33.5	33.7	37.9	35.3	35.6
17306	2009/04/01	14:31:03	35.6	35.5	41.0	34.3	38.2
17311	2009/04/01	14:31:18	37.6	36.4	39.7	35.0	34.0
17316	2009/04/01	14:31:33	36.2	39.3	39.1	34.1	34.2
17321	2009/04/01	14:31:48	38.8	38.3	38.9	38.1	40.0
17326	2009/04/01	14:32:03	40.5	42.6	37.8	35.3	41.5
17331	2009/04/01	14:32:18	38.9	39.3	35.5	36.1	35.9
17336	2009/04/01	14:32:33	41.1	37.3	40.7	41.0	38.1
17341	2009/04/01	14:32:48	40.4	41.5	38.2	38.7	39.8
17346	2009/04/01	14:33:03	37.2	36.5	37.3	36.0	35.9
17351	2009/04/01	14:33:18	40.0	33.5	38.3	38.0	37.5
17356	2009/04/01	14:33:33	33.5	34.1	33.2	33.3	32.7
17361	2009/04/01	14:33:48	35.7	33.2	33.6	35.2	33.0
17366	2009/04/01	14:34:03	34.1	33.3	33.1	33.2	32.8
17371	2009/04/01	14:34:18	35.9	34.1	37.0	34.1	33.6
17376	2009/04/01	14:34:33	34.9	35.1	33.5	32.6	32.9
17381	2009/04/01	14:34:48	36.8	33.9	33.8	37.8	34.6
17386	2009/04/01	14:35:03	33.3	35.9	35.0	37.4	36.3
17391	2009/04/01	14:35:18	39.7	39.4	42.7	40.9	40.2
17396	2009/04/01	14:35:33	40.1	38.1	37.5	39.8	39.7
17401	2009/04/01	14:35:48	39.2	39.4	37.8	37.9	36.9
17406	2009/04/01	14:36:03	37.0	35.5	36.1	36.5	37.6
17411	2009/04/01	14:36:18	36.8	38.7	37.3	36.8	34.4
17416	2009/04/01	14:36:33	34.0	33.7	38.6	37.7	36.9
17421	2009/04/01	14:36:48	38.8	36.9	34.2	36.5	34.7
17426	2009/04/01	14:37:03	34.9	33.9	38.6	37.0	34.2
17431	2009/04/01	14:37:18	35.3	37.0	37.8	40.9	34.1
17436	2009/04/01	14:37:33	35.9	36.1	34.2	39.3	34.8
17441	2009/04/01	14:37:48	34.0	35.2	33.5	34.1	32.4
17446	2009/04/01	14:38:03	33.0	33.3	33.0	33.0	32.4
17451	2009/04/01	14:38:18	32.3	33.1	34.1	32.9	33.3
17456	2009/04/01	14:38:33	32.9	32.7	32.9	32.3	32.4
17461	2009/04/01	14:38:48	32.7	32.5	33.1	32.8	34.9
17466	2009/04/01	14:39:03	33.0	32.9	33.6	32.8	33.0
17471	2009/04/01	14:39:18	33.2	33.8	36.3	35.7	37.3
17476	2009/04/01	14:39:33	33.7	33.8	33.4	33.5	34.4
17481	2009/04/01	14:39:48	35.4	34.1	34.8	34.5	34.4
17486	2009/04/01	14:40:03	34.4	34.0	34.1	36.2	34.2
17491	2009/04/01	14:40:18	34.8	34.2	34.4	34.0	33.3
17496	2009/04/01	14:40:33	37.1	36.9	35.9	35.8	40.5
17501	2009/04/01	14:40:48	36.6	35.5	39.5	36.7	35.3
17506	2009/04/01	14:41:03	37.6	38.4	35.9	39.1	37.9
17511	2009/04/01	14:41:18	38.3	36.2	36.6	34.8	38.1
17516	2009/04/01	14:41:33	38.9	36.9	33.7	33.8	37.6
17521	2009/04/01	14:41:48	33.0	33.4	33.8	33.4	33.1
17526	2009/04/01	14:42:03	33.3	33.1	33.3	38.9	38.0
17531	2009/04/01	14:42:18	33.5	33.7	33.2	33.0	33.1
17536	2009/04/01	14:42:33	33.7	32.6	33.4	33.2	32.3
17541	2009/04/01	14:42:48	32.4	35.0	39.2	36.7	36.4
17546	2009/04/01	14:43:03	46.2	36.5	36.5	36.1	36.2
17551	2009/04/01	14:43:18	32.7	38.6	35.0	34.1	34.5
17556	2009/04/01	14:43:33	35.2	33.5	36.2	39.2	33.7
17561	2009/04/01	14:43:48	39.7	36.2	35.2	39.8	36.4
17566	2009/04/01	14:44:03	33.6	35.2	35.0	33.8	37.4
17571	2009/04/01	14:44:18	37.5	37.5	36.5	42.1	43.7
17576	2009/04/01	14:44:33	42.8	47.7	44.1	42.6	45.6
17581	2009/04/01	14:44:48	44.7	41.6	43.9	40.8	42.0
17586	2009/04/01	14:45:03	41.9	40.3	42.3	39.4	39.1
17591	2009/04/01	14:45:18	38.4	35.8	37.3	36.9	35.6
17596	2009/04/01	14:45:33	35.5	34.5	34.2	36.6	35.3
17601	2009/04/01	14:45:48	34.9	33.4	33.6	34.3	34.1
17606	2009/04/01	14:46:03	36.0	33.9	33.7	34.1	33.0
17611	2009/04/01	14:46:18	33.0	33.4	33.3	33.1	33.5
17616	2009/04/01	14:46:33	32.3	33.0	32.7	33.1	33.4
17621	2009/04/01	14:46:48	34.3	37.5	34.0	33.2	32.7
17626	2009/04/01	14:47:03	33.2	37.5	46.1	35.1	35.0
17631	2009/04/01	14:47:18	36.7	37.2	33.2	33.5	33.2
17636	2009/04/01	14:47:33	32.5	33.6	33.1	33.9	33.7
17641	2009/04/01	14:47:48	33.7	37.4	33.8	37.6	36.3
17646	2009/04/01	14:48:03	36.8	35.5	37.2	36.0	35.2
17651	2009/04/01	14:48:18	34.8	33.9	33.0	32.5	32.5
17656	2009/04/01	14:48:33	32.7	33.2	32.3	32.5	32.9
17661	2009/04/01	14:48:48	31.8	32.4	32.8	32.3	33.1
17666	2009/04/01	14:49:03	35.4	34.0	32.8	34.8	36.4
17671	2009/04/01	14:49:18	33.6	33.0	32.3	33.1	32.7
17676	2009/04/01	14:49:33	32.0	32.2	34.7	32.8	38.4
17681	2009/04/01	14:49:48	32.6	32.6	32.8	34.3	32.6
17686	2009/04/01	14:50:03	32.4	33.0	32.9	32.3	36.0
17691	2009/04/01	14:50:18	33.7	32.8	32.7	32.5	33.5
17696	2009/04/01	14:50:33	32.8	32.4	33.5	33.0	33.1
17701	2009/04/01	14:50:48	33.4	32.5	32.7	33.0	33.2
17706	2009/04/01	14:51:03	34.3	32.7	36.5	34.6	40.2
17711	2009/04/01	14:51:18	37.0	36.4	33.8	34.1	34.5
17716	2009/04/01	14:51:33	40.2	46.9	45.3	44.4	43.6
17721	2009/04/01	14:51:48	40.5	38.1	40.3	40.5	38.4
17726	2009/04/01	14:52:03	36.7	36.1	42.0	39.6	41.3
17731	2009/04/01	14:52:18	37.4	36.5	38.4	38.1	34.8
17736	2009/04/01	14:52:33	36.9	36.2	36.5	36.4	34.7
17741	2009/04/01	14:52:48	33.9	35.3	37.5	38.8	36.5
17746	2009/04/01	14:53:03	35.6	38.4	35.9	35.6	37.2

17751	2009/04/01	14:53:18	35.3	37.1	39.8	42.9	51.5
17756	2009/04/01	14:53:33	59.7	63.2	79.0	75.9	65.2
17761	2009/04/01	14:53:48	56.4	52.3	46.3	44.0	44.3
17766	2009/04/01	14:54:03	40.3	39.5	36.2	32.3	32.5
17771	2009/04/01	14:54:18	32.3	32.7	32.2	34.1	34.6
17776	2009/04/01	14:54:33	32.3	32.5	32.4	32.6	32.4
17781	2009/04/01	14:54:48	32.8	32.6	33.6	33.3	33.9
17786	2009/04/01	14:55:03	32.8	35.7	36.8	37.8	40.8
17791	2009/04/01	14:55:18	42.8	43.5	43.8	45.9	43.6
17796	2009/04/01	14:55:33	41.9	43.3	47.0	45.8	42.1
17801	2009/04/01	14:55:48	39.2	40.1	40.0	40.0	39.2
17806	2009/04/01	14:56:03	39.6	40.3	38.2	37.1	35.0
17811	2009/04/01	14:56:18	36.1	35.4	34.0	35.6	34.9
17816	2009/04/01	14:56:33	34.1	33.8	33.5	33.3	33.6
17821	2009/04/01	14:56:48	35.8	38.1	34.8	37.6	34.1
17826	2009/04/01	14:57:03	33.6	37.8	38.4	39.5	38.2
17831	2009/04/01	14:57:18	34.4	36.3	38.5	35.0	36.1
17836	2009/04/01	14:57:33	32.5	32.4	32.4	32.8	33.3
17841	2009/04/01	14:57:48	33.6	33.3	33.3	34.8	33.4
17846	2009/04/01	14:58:03	33.5	33.5	32.8	35.0	34.5
17851	2009/04/01	14:58:18	36.7	34.4	35.0	37.4	32.8
17856	2009/04/01	14:58:33	32.5	33.4	33.6	32.4	32.5
17861	2009/04/01	14:58:48	32.6	36.3	35.5	33.5	33.4
17866	2009/04/01	14:59:03	33.9	34.3	35.1	34.9	34.4
17871	2009/04/01	14:59:18	33.4	33.4	33.4	35.8	37.5
17876	2009/04/01	14:59:33	33.5	33.7	33.8	33.1	32.6
17881	2009/04/01	14:59:48	32.6	33.0	32.8	33.4	35.4
17886	2009/04/01	15:00:03	32.2	35.4	33.1	35.5	38.7
17891	2009/04/01	15:00:18	35.6	32.7	32.6	32.7	32.4
17896	2009/04/01	15:00:33	32.3	32.9	32.5	32.7	32.3
17901	2009/04/01	15:00:48	33.2	33.7	33.3	32.4	34.0
17906	2009/04/01	15:01:03	33.2	32.6	33.2	35.4	32.6
17911	2009/04/01	15:01:18	32.1	33.3	32.5	32.2	36.2
17916	2009/04/01	15:01:33	33.1	32.3	33.4	33.7	33.1
17921	2009/04/01	15:01:48	32.1	32.6	35.4	32.0	32.6
17926	2009/04/01	15:02:03	33.0	32.7	32.7	32.8	32.4
17931	2009/04/01	15:02:18	34.1	32.2	32.0	32.6	32.7
17936	2009/04/01	15:02:33	32.5	32.3	32.5	34.1	32.1
17941	2009/04/01	15:02:48	32.4	34.0	32.3	32.7	33.1
17946	2009/04/01	15:03:03	32.4	32.8	32.1	32.4	32.4
17951	2009/04/01	15:03:18	32.3	32.2	32.1	32.1	34.0
17956	2009/04/01	15:03:33	35.3	34.1	36.9	36.5	33.0
17961	2009/04/01	15:03:48	32.3	32.4	33.3	35.2	35.8
17966	2009/04/01	15:04:03	36.4	35.3	37.3	37.5	33.2
17971	2009/04/01	15:04:18	32.5	32.5	32.8	34.8	36.1
17976	2009/04/01	15:04:33	35.6	34.5	33.3	33.6	34.8
17981	2009/04/01	15:04:48	41.6	33.9	34.4	32.7	32.3
17986	2009/04/01	15:05:03	32.3	31.9	32.3	32.8	32.6
17991	2009/04/01	15:05:18	33.3	34.9	33.4	32.6	32.4
17996	2009/04/01	15:05:33	33.8	33.8	32.4	32.6	32.7
18001	2009/04/01	15:05:48	32.1	32.5	33.7	33.2	33.4
18006	2009/04/01	15:06:03	32.3	33.1	32.6	32.8	33.2
18011	2009/04/01	15:06:18	34.2	33.7	33.9	32.5	32.3
18016	2009/04/01	15:06:33	32.4	33.2	31.7	33.3	31.8
18021	2009/04/01	15:06:48	32.3	32.1	32.1	34.1	32.5
18026	2009/04/01	15:07:03	33.9	33.0	32.1	32.3	32.3
18031	2009/04/01	15:07:18	32.5	32.3	32.9	32.2	32.4
18036	2009/04/01	15:07:33	32.0	32.6	32.8	32.3	35.4
18041	2009/04/01	15:07:48	32.0	35.2	32.3	33.6	32.7
18046	2009/04/01	15:08:03	34.9	32.5	35.7	35.2	33.4
18051	2009/04/01	15:08:18	35.6	34.6	33.5	35.8	35.8
18056	2009/04/01	15:08:33	37.0	35.3	36.6	35.9	35.5
18061	2009/04/01	15:08:48	36.7	37.3	36.5	37.9	34.9
18066	2009/04/01	15:09:03	36.4	35.0	34.1	34.6	34.2
18071	2009/04/01	15:09:18	34.6	34.1	33.2	35.4	34.5
18076	2009/04/01	15:09:33	36.1	34.6	34.0	38.0	38.1
18081	2009/04/01	15:09:48	37.7	37.2	34.5	34.8	37.0
18086	2009/04/01	15:10:03	34.6	34.0	34.0	33.0	33.6
18091	2009/04/01	15:10:18	33.9	34.5	33.6	33.2	33.2
18096	2009/04/01	15:10:33	35.4	34.6	35.3	33.8	36.0
18101	2009/04/01	15:10:48	34.0	33.6	35.1	32.6	32.9
18106	2009/04/01	15:11:03	32.8	32.5	32.7	32.2	32.6
18111	2009/04/01	15:11:18	32.6	32.5	32.5	33.6	32.4
18116	2009/04/01	15:11:33	32.0	32.4	31.9	34.0	36.5
18121	2009/04/01	15:11:48	34.5	31.8	32.6	36.9	31.9
18126	2009/04/01	15:12:03	31.9	32.2	31.7	33.1	32.5
18131	2009/04/01	15:12:18	32.8	34.3	32.1	33.0	32.1
18136	2009/04/01	15:12:33	32.6	32.4	31.9	32.2	31.8
18141	2009/04/01	15:12:48	32.6	31.9	32.6	32.3	32.7
18146	2009/04/01	15:13:03	32.2	32.4	32.0	32.1	31.9
18151	2009/04/01	15:13:18	32.2	32.3	34.6	35.7	35.1
18156	2009/04/01	15:13:33	32.5	31.9	32.8	32.5	32.9
18161	2009/04/01	15:13:48	32.6	32.7	32.3	32.3	31.9
18166	2009/04/01	15:14:03	32.3	33.0	33.5	33.2	31.9
18171	2009/04/01	15:14:18	32.2	32.2	31.9	32.6	33.0
18176	2009/04/01	15:14:33	32.2	32.1	32.4	32.4	32.4
18181	2009/04/01	15:14:48	32.1	32.4	32.5	31.7	32.1
18186	2009/04/01	15:15:03	32.2	32.8	37.5	37.0	36.1
18191	2009/04/01	15:15:18	34.6	32.7	33.4	32.6	32.7
18196	2009/04/01	15:15:33	32.6	32.1	35.9	34.7	34.0
18201	2009/04/01	15:15:48	33.9	34.5	33.3	32.2	32.7
18206	2009/04/01	15:16:03	32.8	35.8	38.2	32.3	33.1
18211	2009/04/01	15:16:18	32.2	32.1	32.8	33.3	33.6
18216	2009/04/01	15:16:33	32.3	31.9	33.9	35.1	32.4
18221	2009/04/01	15:16:48	32.4	31.9	33.2	32.2	32.2
18226	2009/04/01	15:17:03	32.1	33.2	32.4	32.4	32.4
18231	2009/04/01	15:17:18	33.1	32.3	32.8	32.3	34.5
18236	2009/04/01	15:17:33	32.0	31.8	32.3	32.3	32.2
18241	2009/04/01	15:17:48	32.5	32.1	32.2	31.9	32.0

18246	2009/04/01	15:18:03	32.9	32.2	33.5	33.3	32.9
18251	2009/04/01	15:18:18	35.7	36.0	32.4	35.9	32.6
18256	2009/04/01	15:18:33	32.1	33.0	32.8	35.2	33.2
18261	2009/04/01	15:18:48	32.3	32.3	31.9	32.5	34.0
18266	2009/04/01	15:19:03	33.6	34.3	34.0	32.8	34.6
18271	2009/04/01	15:19:18	36.6	37.5	36.6	32.3	32.2
18276	2009/04/01	15:19:33	33.2	32.1	33.2	32.4	32.3
18281	2009/04/01	15:19:48	38.3	33.2	33.6	32.6	32.9
18286	2009/04/01	15:20:03	32.8	35.3	34.9	32.4	31.8
18291	2009/04/01	15:20:18	32.0	33.2	32.4	36.2	35.6
18296	2009/04/01	15:20:33	32.7	32.2	32.2	35.3	32.1
18301	2009/04/01	15:20:48	32.5	32.0	32.3	31.9	32.0
18306	2009/04/01	15:21:03	32.6	32.3	32.5	32.6	33.1
18311	2009/04/01	15:21:18	32.2	32.4	33.7	32.3	32.3
18316	2009/04/01	15:21:33	33.5	34.5	32.8	34.1	35.1
18321	2009/04/01	15:21:48	32.0	32.1	33.2	32.5	32.1
18326	2009/04/01	15:22:03	32.4	32.6	32.9	32.4	34.3
18331	2009/04/01	15:22:18	32.5	32.6	39.9	34.6	32.2
18336	2009/04/01	15:22:33	32.7	32.6	32.5	31.6	31.7
18341	2009/04/01	15:22:48	32.4	32.4	32.4	33.5	34.8
18346	2009/04/01	15:23:03	32.0	32.4	35.5	37.1	33.8
18351	2009/04/01	15:23:18	35.9	36.2	32.6	32.5	32.3
18356	2009/04/01	15:23:33	32.6	33.1	32.1	32.2	32.2
18361	2009/04/01	15:23:48	32.3	35.8	32.5	32.4	32.9
18366	2009/04/01	15:24:03	32.3	32.4	33.3	32.7	34.4
18371	2009/04/01	15:24:18	32.0	32.3	32.6	32.8	32.8
18376	2009/04/01	15:24:33	34.4	32.9	32.3	32.8	32.4
18381	2009/04/01	15:24:48	31.9	33.1	32.8	32.5	32.7
18386	2009/04/01	15:25:03	32.8	32.5	33.1	32.3	31.7
18391	2009/04/01	15:25:18	32.4	33.3	32.3	32.6	34.1
18396	2009/04/01	15:25:33	32.6	34.8	34.2	37.0	33.7
18401	2009/04/01	15:25:48	37.2	32.8	33.7	33.8	35.0
18406	2009/04/01	15:26:03	32.7	33.6	35.8	36.2	34.9
18411	2009/04/01	15:26:18	34.2	34.4	34.7	33.5	33.6
18416	2009/04/01	15:26:33	34.0	33.6	33.8	32.7	34.8
18421	2009/04/01	15:26:48	33.1	34.0	34.8	33.5	33.2
18426	2009/04/01	15:27:03	35.0	33.3	34.2	34.4	33.4
18431	2009/04/01	15:27:18	34.1	33.6	33.3	33.7	35.3
18436	2009/04/01	15:27:33	35.3	33.5	33.8	37.8	32.7
18441	2009/04/01	15:27:48	33.4	35.6	32.6	39.0	33.8
18446	2009/04/01	15:28:03	34.1	33.3	33.3	34.4	33.4
18451	2009/04/01	15:28:18	34.4	33.8	34.3	33.7	35.2
18456	2009/04/01	15:28:33	34.8	33.6	33.3	35.7	35.1
18461	2009/04/01	15:28:48	33.5	33.8	33.8	33.7	33.2
18466	2009/04/01	15:29:03	34.7	37.7	36.6	33.7	33.7
18471	2009/04/01	15:29:18	33.7	36.7	37.5	33.5	35.9
18476	2009/04/01	15:29:33	33.9	32.4	31.9	31.8	32.3
18481	2009/04/01	15:29:48	32.9	32.4	32.0	32.2	33.6
18486	2009/04/01	15:30:03	36.4	37.0	32.5	32.4	32.9
18491	2009/04/01	15:30:18	32.2	33.4	33.9	32.1	32.3
18496	2009/04/01	15:30:33	32.8	32.9	32.0	33.6	31.7
18501	2009/04/01	15:30:48	32.7	32.5	32.3	32.3	37.9
18506	2009/04/01	15:31:03	32.6	32.1	33.9	36.1	41.1
18511	2009/04/01	15:31:18	52.0	51.3	56.6	76.9	57.6
18516	2009/04/01	15:31:33	53.0	51.6	48.6	45.2	36.3
18521	2009/04/01	15:31:48	33.0	32.6	32.3	32.2	32.4
18526	2009/04/01	15:32:03	32.3	32.7	32.3	32.4	32.1
18531	2009/04/01	15:32:18	33.7	32.6	32.7	32.5	32.0
18536	2009/04/01	15:32:33	32.7	33.0	32.2	32.5	32.4
18541	2009/04/01	15:32:48	31.9	32.6	32.8	32.6	32.3
18546	2009/04/01	15:33:03	32.7	32.0	32.0	32.1	32.7
18551	2009/04/01	15:33:18	32.4	32.9	32.2	32.3	33.1
18556	2009/04/01	15:33:33	32.4	32.4	32.6	32.5	33.0
18561	2009/04/01	15:33:48	32.7	32.3	33.3	33.1	32.1
18566	2009/04/01	15:34:03	32.1	32.1	32.7	32.1	32.6
18571	2009/04/01	15:34:18	32.0	32.4	32.3	32.6	32.2
18576	2009/04/01	15:34:33	32.6	32.4	32.2	33.2	32.7
18581	2009/04/01	15:34:48	32.0	32.4	32.9	32.7	32.3
18586	2009/04/01	15:35:03	32.2	32.3	32.4	32.8	32.5
18591	2009/04/01	15:35:18	32.5	34.1	32.8	34.7	32.2
18596	2009/04/01	15:35:33	32.7	32.5	32.6	32.9	37.7
18601	2009/04/01	15:35:48	34.6	33.1	35.3	32.6	32.6
18606	2009/04/01	15:36:03	32.3	32.6	32.2	32.3	32.8
18611	2009/04/01	15:36:18	32.1	32.6	32.1	32.3	32.6
18616	2009/04/01	15:36:33	34.1	32.6	32.2	32.4	32.0
18621	2009/04/01	15:36:48	32.8	32.0	32.6	32.8	32.6
18626	2009/04/01	15:37:03	32.3	32.6	31.8	32.3	32.4
18631	2009/04/01	15:37:18	32.6	32.0	32.5	32.5	32.2
18636	2009/04/01	15:37:33	36.1	32.2	36.0	32.2	32.6
18641	2009/04/01	15:37:48	31.8	32.2	32.2	32.8	32.4
18646	2009/04/01	15:38:03	32.7	32.1	32.0	31.9	32.4
18651	2009/04/01	15:38:18	32.8	35.7	32.2	31.9	32.3
18656	2009/04/01	15:38:33	32.2	32.3	32.8	32.1	32.9
18661	2009/04/01	15:38:48	32.1	32.2	32.8	32.4	31.9
18666	2009/04/01	15:39:03	31.8	31.6	32.5	32.1	31.9
18671	2009/04/01	15:39:18	35.5	32.1	32.6	32.7	32.7
18676	2009/04/01	15:39:33	32.1	32.2	32.3	32.5	33.2
18681	2009/04/01	15:39:48	32.3	34.2	32.1	31.8	32.3
18686	2009/04/01	15:40:03	32.2	32.3	32.2	32.5	32.6
18691	2009/04/01	15:40:18	32.7	32.5	33.3	34.9	31.8
18696	2009/04/01	15:40:33	32.1	31.8	32.7	32.5	32.6
18701	2009/04/01	15:40:48	32.9	32.7	33.2	33.0	32.6
18706	2009/04/01	15:41:03	33.5	32.4	32.8	32.3	32.1
18711	2009/04/01	15:41:18	32.9	32.7	33.4	32.3	32.6
18716	2009/04/01	15:41:33	34.6	31.9	33.1	35.0	35.4
18721	2009/04/01	15:41:48	33.3	34.4	34.0	33.5	32.2
18726	2009/04/01	15:42:03	32.3	32.8	34.9	32.3	33.0
18731	2009/04/01	15:42:18	32.7	32.3	32.7	31.9	33.0
18736	2009/04/01	15:42:33	32.8	33.2	32.9	32.6	32.5

18741	2009/04/01	15:42:48	32.9	34.9	31.6	32.0	32.2
18746	2009/04/01	15:43:03	33.6	33.7	35.4	32.6	32.8
18751	2009/04/01	15:43:18	32.8	33.9	37.8	45.1	53.8
18756	2009/04/01	15:43:33	61.5	75.2	66.0	58.3	54.7
18761	2009/04/01	15:43:48	44.2	38.5	39.6	32.7	35.3
18766	2009/04/01	15:44:03	34.8	34.9	32.7	32.6	32.9
18771	2009/04/01	15:44:18	32.5	32.3	33.9	33.4	35.1
18776	2009/04/01	15:44:33	34.4	33.1	33.5	33.7	33.2
18781	2009/04/01	15:44:48	31.9	32.7	33.0	32.8	33.2
18786	2009/04/01	15:45:03	32.2	34.0	32.6	33.5	32.7
18791	2009/04/01	15:45:18	33.1	33.4	33.4	34.1	33.7
18796	2009/04/01	15:45:33	32.5	34.0	33.3	32.7	33.6
18801	2009/04/01	15:45:48	32.9	33.1	32.9	33.4	33.1
18806	2009/04/01	15:46:03	32.6	34.6	33.5	34.5	35.1
18811	2009/04/01	15:46:18	36.5	33.4	32.3	36.5	35.1
18816	2009/04/01	15:46:33	34.4	34.5	35.5	33.7	34.6
18821	2009/04/01	15:46:48	33.3	33.5	36.8	32.6	35.0
18826	2009/04/01	15:47:03	36.4	32.9	37.1	37.9	32.0
18831	2009/04/01	15:47:18	35.9	33.1	32.3	33.0	32.3
18836	2009/04/01	15:47:33	32.5	32.9	33.4	33.3	33.7
18841	2009/04/01	15:47:48	32.2	32.3	33.1	32.4	33.1
18846	2009/04/01	15:48:03	32.1	32.0	32.0	32.6	37.0
18851	2009/04/01	15:48:18	32.7	34.6	33.4	33.9	32.9
18856	2009/04/01	15:48:33	32.6	36.9	32.2	32.3	32.1
18861	2009/04/01	15:48:48	32.4	32.1	32.4	34.5	32.7
18866	2009/04/01	15:49:03	36.4	34.8	32.5	35.7	32.2
18871	2009/04/01	15:49:18	32.2	33.4	32.9	32.5	34.5
18876	2009/04/01	15:49:33	32.8	33.3	32.1	34.8	32.5
18881	2009/04/01	15:49:48	34.4	32.1	33.3	32.9	32.3
18886	2009/04/01	15:50:03	32.6	32.0	33.8	33.7	38.3
18891	2009/04/01	15:50:18	38.1	32.3	33.3	32.5	32.5
18896	2009/04/01	15:50:33	32.9	32.6	33.3	32.7	33.1
18901	2009/04/01	15:50:48	33.1	36.7	34.9	35.8	32.3
18906	2009/04/01	15:51:03	32.6	32.9	33.0	32.7	32.8
18911	2009/04/01	15:51:18	33.1	32.7	32.7	32.4	32.4
18916	2009/04/01	15:51:33	32.3	32.9	33.6	32.9	32.2
18921	2009/04/01	15:51:48	33.4	33.5	34.4	33.0	35.4
18926	2009/04/01	15:52:03	33.8	33.4	33.2	36.0	34.1
18931	2009/04/01	15:52:18	33.0	32.6	32.4	32.6	32.3
18936	2009/04/01	15:52:33	32.4	33.4	32.4	32.1	32.2
18941	2009/04/01	15:52:48	32.7	33.1	35.9	32.8	32.0
18946	2009/04/01	15:53:03	32.6	32.3	33.0	32.3	32.8
18951	2009/04/01	15:53:18	32.2	32.2	32.1	32.3	33.4
18956	2009/04/01	15:53:33	35.9	33.2	35.8	32.6	32.9
18961	2009/04/01	15:53:48	32.2	32.4	32.6	32.3	32.0
18966	2009/04/01	15:54:03	32.7	32.3	32.8	33.0	32.7
18971	2009/04/01	15:54:18	32.7	32.3	32.1	31.9	33.0
18976	2009/04/01	15:54:33	32.2	32.6	35.7	33.3	32.7
18981	2009/04/01	15:54:48	33.7	37.1	32.2	31.9	32.5
18986	2009/04/01	15:55:03	34.4	34.3	33.8	32.7	32.4
18991	2009/04/01	15:55:18	33.0	33.7	32.0	32.3	32.2
18996	2009/04/01	15:55:33	34.2	35.6	33.1	32.6	45.1
19001	2009/04/01	15:55:48	32.7	33.1	32.3	33.3	33.3
19006	2009/04/01	15:56:03	32.6	33.7	33.2	32.8	32.1
19011	2009/04/01	15:56:18	32.2	32.1	32.2	33.2	33.8
19016	2009/04/01	15:56:33	32.9	33.0	33.5	32.2	32.3
19021	2009/04/01	15:56:48	32.6	32.0	33.0	34.6	33.1
19026	2009/04/01	15:57:03	33.2	32.1	32.7	35.2	33.0
19031	2009/04/01	15:57:18	32.8	32.7	33.0	32.6	32.7
19036	2009/04/01	15:57:33	32.9	32.8	32.6	32.9	33.1
19041	2009/04/01	15:57:48	32.9	42.7	32.7	32.6	36.1
19046	2009/04/01	15:58:03	34.6	35.0	36.2	33.4	34.8
19051	2009/04/01	15:58:18	32.8	33.6	34.0	32.9	34.9
19056	2009/04/01	15:58:33	33.7	32.4	33.7	35.7	32.9
19061	2009/04/01	15:58:48	33.1	33.0	35.6	36.7	36.3
19066	2009/04/01	15:59:03	32.4	33.2	33.1	33.5	33.0
19071	2009/04/01	15:59:18	32.8	33.1	32.6	32.5	32.5
19076	2009/04/01	15:59:33	32.9	33.2	32.9	33.6	33.1
19081	2009/04/01	15:59:48	34.7	40.7	45.8	63.3	62.4
19086	2009/04/01	16:00:03	78.3	56.8	57.6	47.0	42.7
19091	2009/04/01	16:00:18	41.2	32.7	33.2	32.9	32.7
19096	2009/04/01	16:00:33	32.4	32.5	32.5	33.2	34.1
19101	2009/04/01	16:00:48	33.4	32.3	32.6	32.2	32.6
19106	2009/04/01	16:01:03	31.9	32.9	32.8	32.6	33.7
19111	2009/04/01	16:01:18	32.1	32.3	32.9	34.2	34.0
19116	2009/04/01	16:01:33	35.4	34.4	33.4	32.7	32.6
19121	2009/04/01	16:01:48	33.4	32.2	33.1	33.0	32.6
19126	2009/04/01	16:02:03	34.9	32.4	32.5	34.2	32.2
19131	2009/04/01	16:02:18	32.2	32.2	32.4	32.8	33.6
19136	2009/04/01	16:02:33	34.7	33.6	33.8	35.9	32.5
19141	2009/04/01	16:02:48	32.4	32.9	33.4	32.7	32.6
19146	2009/04/01	16:03:03	33.0	32.2	33.1	34.9	32.5
19151	2009/04/01	16:03:18	32.2	33.7	33.2	37.5	33.4
19156	2009/04/01	16:03:33	33.1	32.7	32.6	32.8	33.0
19161	2009/04/01	16:03:48	32.7	32.6	33.1	33.0	32.9
19166	2009/04/01	16:04:03	32.7	34.1	33.5	33.1	32.7
19171	2009/04/01	16:04:18	33.1	32.7	35.8	35.7	32.9
19176	2009/04/01	16:04:33	33.0	33.1	32.8	32.9	33.0
19181	2009/04/01	16:04:48	32.8	32.3	33.9	32.9	35.1
19186	2009/04/01	16:05:03	35.3	32.6	33.2	32.4	33.8
19191	2009/04/01	16:05:18	33.6	32.2	33.6	46.3	33.1
19196	2009/04/01	16:05:33	32.6	32.7	33.0	36.8	33.2
19201	2009/04/01	16:05:48	35.0	35.1	33.2	34.2	34.2
19206	2009/04/01	16:06:03	32.8	32.4	34.2	32.5	38.4
19211	2009/04/01	16:06:18	32.7	35.6	32.7	33.8	33.3
19216	2009/04/01	16:06:33	32.3	33.0	32.7	33.0	33.2
19221	2009/04/01	16:06:48	34.5	33.1	32.5	32.8	32.4
19226	2009/04/01	16:07:03	33.1	32.8	33.3	32.5	32.2
19231	2009/04/01	16:07:18	33.6	33.4	33.4	32.6	33.1

19236	2009/04/01	16:07:33	33.0	33.3	32.5	37.0	33.7
19241	2009/04/01	16:07:48	34.8	32.8	33.9	32.7	32.8
19246	2009/04/01	16:08:03	32.9	33.2	33.3	32.4	34.0
19251	2009/04/01	16:08:18	34.9	35.4	32.9	33.2	33.8
19256	2009/04/01	16:08:33	32.9	33.5	32.8	32.7	33.1
19261	2009/04/01	16:08:48	33.4	32.8	33.7	34.1	33.4
19266	2009/04/01	16:09:03	32.4	33.0	34.3	32.8	33.5
19271	2009/04/01	16:09:18	34.7	34.1	33.2	32.7	33.3
19276	2009/04/01	16:09:33	33.4	33.2	33.0	32.8	32.5
19281	2009/04/01	16:09:48	36.5	32.8	39.4	32.7	38.2
19286	2009/04/01	16:10:03	32.4	37.8	40.8	40.7	50.2
19291	2009/04/01	16:10:18	53.0	56.3	79.6	65.1	55.3
19296	2009/04/01	16:10:33	47.0	44.6	47.0	39.5	34.9
19301	2009/04/01	16:10:48	32.9	34.7	33.5	33.5	43.3
19306	2009/04/01	16:11:03	33.7	32.7	34.0	33.0	35.2
19311	2009/04/01	16:11:18	38.2	32.9	35.5	33.6	33.6
19316	2009/04/01	16:11:33	36.5	33.9	36.7	33.7	33.4
19321	2009/04/01	16:11:48	33.9	33.0	33.0	33.4	32.9
19326	2009/04/01	16:12:03	33.2	33.8	35.1	34.7	34.4
19331	2009/04/01	16:12:18	35.8	35.2	33.9	35.0	36.0
19336	2009/04/01	16:12:33	34.1	33.8	33.4	33.8	32.7
19341	2009/04/01	16:12:48	36.7	33.2	32.8	35.7	35.0
19346	2009/04/01	16:13:03	33.9	34.0	36.1	32.8	33.6
19351	2009/04/01	16:13:18	33.3	33.9	34.0	43.1	33.8
19356	2009/04/01	16:13:33	34.0	33.2	33.5	33.1	35.3
19361	2009/04/01	16:13:48	33.5	33.4	33.4	33.9	33.2
19366	2009/04/01	16:14:03	33.5	33.1	37.1	34.3	33.8
19371	2009/04/01	16:14:18	33.5	33.2	34.9	34.5	33.8
19376	2009/04/01	16:14:33	33.5	34.4	33.9	33.2	33.7
19381	2009/04/01	16:14:48	33.8	36.9	33.8	32.9	34.0
19386	2009/04/01	16:15:03	33.3	33.0	33.5	33.1	33.3
19391	2009/04/01	16:15:18	34.2	34.2	33.5	34.2	33.6
19396	2009/04/01	16:15:33	34.2	33.5	33.5	33.1	36.5
19401	2009/04/01	16:15:48	34.7	33.7	33.2	33.6	34.7
19406	2009/04/01	16:16:03	33.4	34.0	33.5	33.4	33.1
19411	2009/04/01	16:16:18	34.9	34.2	34.0	33.0	34.4
19416	2009/04/01	16:16:33	33.4	34.8	35.9	33.9	33.5
19421	2009/04/01	16:16:48	35.8	34.6	33.7	34.1	34.0
19426	2009/04/01	16:17:03	37.6	32.7	34.2	34.2	35.1
19431	2009/04/01	16:17:18	33.7	33.9	34.4	33.3	34.7
19436	2009/04/01	16:17:33	34.8	33.0	39.7	35.6	34.0
19441	2009/04/01	16:17:48	33.3	32.9	33.4	33.1	33.8
19446	2009/04/01	16:18:03	34.8	33.4	33.2	34.0	33.1
19451	2009/04/01	16:18:18	34.0	32.7	34.1	32.6	33.7
19456	2009/04/01	16:18:33	33.1	32.8	33.4	32.8	33.5
19461	2009/04/01	16:18:48	36.4	33.4	34.0	33.3	34.6
19466	2009/04/01	16:19:03	33.2	34.3	34.8	35.4	33.5
19471	2009/04/01	16:19:18	33.7	35.0	42.2	33.0	33.2
19476	2009/04/01	16:19:33	33.9	34.5	32.8	40.5	34.4
19481	2009/04/01	16:19:48	34.5	35.0	33.1	34.1	32.8
19486	2009/04/01	16:20:03	32.6	33.7	32.8	34.0	33.1
19491	2009/04/01	16:20:18	33.7	33.1	34.3	33.1	32.9
19496	2009/04/01	16:20:33	33.1	34.2	33.8	33.6	33.3
19501	2009/04/01	16:20:48	32.7	33.9	35.4	33.2	33.0
19506	2009/04/01	16:21:03	32.8	32.3	33.4	32.6	36.9
19511	2009/04/01	16:21:18	33.9	32.8	33.4	32.7	33.3
19516	2009/04/01	16:21:33	33.6	34.3	33.1	34.0	33.3
19521	2009/04/01	16:21:48	32.7	33.0	33.0	33.6	34.1
19526	2009/04/01	16:22:03	34.0	32.9	33.1	33.5	39.6
19531	2009/04/01	16:22:18	33.3	33.2	56.8	33.3	33.2
19536	2009/04/01	16:22:33	32.6	34.0	33.1	33.8	35.3
19541	2009/04/01	16:22:48	34.4	34.1	33.4	33.3	33.0
19546	2009/04/01	16:23:03	33.5	33.7	33.2	34.9	33.5
19551	2009/04/01	16:23:18	33.7	34.7	33.0	33.4	33.5
19556	2009/04/01	16:23:33	40.9	34.1	34.8	32.7	35.7
19561	2009/04/01	16:23:48	34.0	35.3	32.9	34.6	33.7
19566	2009/04/01	16:24:03	33.8	33.4	34.5	33.4	34.7
19571	2009/04/01	16:24:18	34.3	35.0	34.5	33.6	33.0
19576	2009/04/01	16:24:33	32.9	34.1	34.3	33.4	34.4
19581	2009/04/01	16:24:48	33.7	33.5	38.1	32.9	35.4
19586	2009/04/01	16:25:03	33.8	33.1	33.0	34.1	33.9
19591	2009/04/01	16:25:18	33.8	34.6	33.2	33.0	33.5
19596	2009/04/01	16:25:33	33.6	33.8	33.4	36.6	33.2
19601	2009/04/01	16:25:48	34.1	33.3	33.8	33.6	33.4
19606	2009/04/01	16:26:03	33.1	34.3	35.6	36.5	33.5
19611	2009/04/01	16:26:18	33.2	33.0	34.0	35.3	33.6
19616	2009/04/01	16:26:33	33.6	33.9	33.9	33.8	33.7
19621	2009/04/01	16:26:48	33.5	34.1	33.5	35.1	34.7
19626	2009/04/01	16:27:03	34.6	33.8	35.1	35.2	35.7
19631	2009/04/01	16:27:18	36.4	35.8	33.6	36.2	33.5
19636	2009/04/01	16:27:33	36.1	35.5	39.2	33.2	37.6
19641	2009/04/01	16:27:48	34.6	35.1	34.4	34.2	35.6
19646	2009/04/01	16:28:03	39.6	44.6	60.5	62.3	75.6
19651	2009/04/01	16:28:18	58.8	53.4	43.2	40.0	37.1
19656	2009/04/01	16:28:33	35.0	36.3	33.7	34.5	34.4
19661	2009/04/01	16:28:48	34.2	33.7	34.1	34.5	35.5
19666	2009/04/01	16:29:03	33.9	34.6	33.3	35.3	35.1
19671	2009/04/01	16:29:18	34.2	33.8	33.7	35.6	34.4
19676	2009/04/01	16:29:33	34.8	35.9	33.3	35.6	35.8
19681	2009/04/01	16:29:48	34.6	36.4	33.9	35.5	35.7
19686	2009/04/01	16:30:03	35.2	35.5	34.4	34.3	35.2
19691	2009/04/01	16:30:18	34.5	34.0	36.3	43.8	35.6
19696	2009/04/01	16:30:33	43.8	34.8	44.0	33.5	34.4
19701	2009/04/01	16:30:48	34.1	37.9	33.6	49.2	33.9
19706	2009/04/01	16:31:03	42.1	33.7	45.8	36.0	33.9
19711	2009/04/01	16:31:18	37.6	37.5	40.2	38.0	35.6
19716	2009/04/01	16:31:33	46.8	35.4	44.8	35.1	35.1
19721	2009/04/01	16:31:48	41.8	35.2	34.9	34.4	34.4
19726	2009/04/01	16:32:03	37.1	34.7	41.4	36.5	39.3

19731	2009/04/01	16:32:18	46.0	34.4	33.6	34.0	37.9
19736	2009/04/01	16:32:33	34.3	36.6	34.5	35.3	36.2
19741	2009/04/01	16:32:48	36.1	36.9	43.2	48.3	63.2
19746	2009/04/01	16:33:03	67.4	77.0	61.9	59.0	51.1
19751	2009/04/01	16:33:18	43.9	40.9	43.8	36.3	35.3
19756	2009/04/01	16:33:33	35.6	35.7	34.4	35.1	37.6
19761	2009/04/01	16:33:48	34.6	35.3	34.8	35.7	34.6
19766	2009/04/01	16:34:03	35.6	38.0	34.8	34.9	35.0
19771	2009/04/01	16:34:18	34.1	34.6	36.3	34.3	36.4
19776	2009/04/01	16:34:33	38.2	34.6	33.9	34.8	34.2
19781	2009/04/01	16:34:48	34.0	34.9	36.2	34.3	36.1
19786	2009/04/01	16:35:03	40.6	44.2	55.7	61.1	74.4
19791	2009/04/01	16:35:18	60.9	57.8	46.8	45.9	40.5
19796	2009/04/01	16:35:33	38.9	34.7	36.2	34.0	36.3
19801	2009/04/01	16:35:48	35.6	34.9	35.9	34.7	37.1
19806	2009/04/01	16:36:03	34.9	34.1	36.8	35.4	35.9
19811	2009/04/01	16:36:18	34.3	34.2	34.9	38.0	34.6
19816	2009/04/01	16:36:33	35.4	34.5	41.6	34.6	35.6
19821	2009/04/01	16:36:48	36.2	38.5	34.8	34.5	35.2
19826	2009/04/01	16:37:03	36.1	33.9	35.3	36.4	35.1
19831	2009/04/01	16:37:18	38.2	34.0	34.6	34.6	41.9
19836	2009/04/01	16:37:33	34.8	34.8	38.3	35.5	34.5
19841	2009/04/01	16:37:48	34.1	34.6	34.9	34.8	37.0
19846	2009/04/01	16:38:03	34.3	37.0	36.6	35.4	35.6
19851	2009/04/01	16:38:18	35.1	35.5	35.6	38.1	35.3
19856	2009/04/01	16:38:33	34.8	34.9	34.6	35.1	34.5
19861	2009/04/01	16:38:48	35.0	36.2	36.5	34.4	35.3
19866	2009/04/01	16:39:03	36.3	38.4	34.5	36.2	35.6
19871	2009/04/01	16:39:18	42.8	34.8	34.8	36.8	35.8
19876	2009/04/01	16:39:33	35.7	36.0	35.4	35.9	34.8
19881	2009/04/01	16:39:48	35.7	36.7	36.3	35.6	36.4
19886	2009/04/01	16:40:03	36.7	36.0	38.5	42.1	34.8
19891	2009/04/01	16:40:18	36.8	39.7	43.1	38.2	36.0
19896	2009/04/01	16:40:33	36.1	36.2	38.7	37.8	37.2
19901	2009/04/01	16:40:48	36.1	36.0	36.9	37.9	40.2
19906	2009/04/01	16:41:03	35.5	36.2	36.8	36.9	35.9
19911	2009/04/01	16:41:18	37.4	37.3	36.6	40.3	45.5
19916	2009/04/01	16:41:33	56.8	61.9	76.1	59.7	57.5
19921	2009/04/01	16:41:48	47.6	43.2	41.6	35.3	35.4
19926	2009/04/01	16:42:03	37.6	36.6	37.5	37.0	36.9
19931	2009/04/01	16:42:18	34.7	35.9	36.4	35.8	36.1
19936	2009/04/01	16:42:33	38.3	38.7	40.4	37.8	39.4
19941	2009/04/01	16:42:48	39.2	36.3	37.6	37.6	36.6
19946	2009/04/01	16:43:03	38.2	38.1	37.0	37.3	36.7
19951	2009/04/01	16:43:18	36.5	36.9	38.3	37.9	36.5
19956	2009/04/01	16:43:33	37.7	38.5	35.5	37.2	35.3
19961	2009/04/01	16:43:48	38.8	35.5	38.5	36.7	37.9
19966	2009/04/01	16:44:03	37.0	37.4	38.1	36.7	35.6
19971	2009/04/01	16:44:18	37.3	39.7	37.7	36.7	35.9
19976	2009/04/01	16:44:33	35.3	37.4	38.7	40.7	35.7
19981	2009/04/01	16:44:48	34.9	35.9	35.9	35.0	37.7
19986	2009/04/01	16:45:03	36.2	36.2	36.4	35.4	35.8
19991	2009/04/01	16:45:18	39.3	37.7	37.5	37.4	38.5
19996	2009/04/01	16:45:33	36.6	37.6	36.1	36.7	37.5
20001	2009/04/01	16:45:48	37.4	35.6	38.6	36.4	39.0
20006	2009/04/01	16:46:03	37.7	39.7	35.9	35.8	36.9
20011	2009/04/01	16:46:18	37.5	40.4	34.9	36.8	47.8
20016	2009/04/01	16:46:33	34.7	36.8	36.3	36.2	35.6
20021	2009/04/01	16:46:48	35.4	40.5	35.1	39.6	36.2
20026	2009/04/01	16:47:03	37.4	39.6	36.1	38.0	35.7
20031	2009/04/01	16:47:18	37.1	38.0	35.8	37.8	35.4
20036	2009/04/01	16:47:33	36.1	36.9	37.4	36.1	37.6
20041	2009/04/01	16:47:48	36.3	35.9	38.7	36.2	35.0
20046	2009/04/01	16:48:03	35.8	41.1	35.8	47.3	36.7
20051	2009/04/01	16:48:18	37.2	34.6	39.4	35.0	35.1
20056	2009/04/01	16:48:33	35.7	38.9	35.1	37.5	35.3
20061	2009/04/01	16:48:48	35.9	35.7	34.9	36.9	37.6
20066	2009/04/01	16:49:03	37.0	36.7	35.9	40.6	38.3
20071	2009/04/01	16:49:18	36.5	36.4	36.1	35.4	35.1
20076	2009/04/01	16:49:33	37.3	35.3	35.1	35.4	35.8
20081	2009/04/01	16:49:48	35.3	39.2	39.9	36.3	38.3
20086	2009/04/01	16:50:03	35.6	34.8	34.5	37.6	35.7
20091	2009/04/01	16:50:18	35.6	36.9	36.4	35.4	35.0
20096	2009/04/01	16:50:33	36.4	36.4	38.3	34.8	37.5
20101	2009/04/01	16:50:48	35.3	47.0	37.8	37.5	36.0
20106	2009/04/01	16:51:03	34.5	36.1	35.9	35.0	35.1
20111	2009/04/01	16:51:18	39.4	36.5	35.3	36.8	35.7
20116	2009/04/01	16:51:33	35.9	47.8	34.9	34.8	36.3
20121	2009/04/01	16:51:48	35.0	34.6	36.7	36.3	38.5
20126	2009/04/01	16:52:03	37.0	34.3	37.1	36.2	35.0
20131	2009/04/01	16:52:18	36.0	35.5	35.2	35.7	36.1
20136	2009/04/01	16:52:33	35.7	34.6	35.1	38.7	35.3
20141	2009/04/01	16:52:48	35.4	38.0	37.0	34.9	37.3
20146	2009/04/01	16:53:03	35.4	37.2	36.0	34.8	38.3
20151	2009/04/01	16:53:18	34.2	34.3	34.2	35.5	34.7
20156	2009/04/01	16:53:33	34.7	35.2	35.5	35.6	35.7
20161	2009/04/01	16:53:48	35.4	36.9	35.4	36.2	34.9
20166	2009/04/01	16:54:03	35.0	37.5	35.0	36.3	39.4
20171	2009/04/01	16:54:18	38.2	37.2	36.6	35.7	37.9
20176	2009/04/01	16:54:33	35.4	36.3	36.5	36.1	36.0
20181	2009/04/01	16:54:48	35.6	35.1	34.5	36.0	35.7
20186	2009/04/01	16:55:03	33.9	35.2	35.5	37.3	36.0
20191	2009/04/01	16:55:18	36.6	35.5	37.4	34.8	34.2
20196	2009/04/01	16:55:33	35.1	34.7	36.9	35.3	36.4
20201	2009/04/01	16:55:48	43.3	35.3	35.6	34.9	36.1
20206	2009/04/01	16:56:03	35.7	34.9	33.9	37.3	35.1
20211	2009/04/01	16:56:18	35.9	38.3	35.1	37.4	36.8
20216	2009/04/01	16:56:33	35.8	34.2	35.7	35.1	35.3
20221	2009/04/01	16:56:48	34.1	35.6	34.7	34.7	36.0

20226	2009/04/01	16:57:03	37.1	34.7	35.2	39.1	35.7
20231	2009/04/01	16:57:18	37.9	43.6	52.4	59.1	69.2
20236	2009/04/01	16:57:33	73.9	55.9	51.6	43.0	40.3
20241	2009/04/01	16:57:48	36.4	37.9	34.7	34.4	33.9
20246	2009/04/01	16:58:03	34.9	35.6	34.3	34.9	34.3
20251	2009/04/01	16:58:18	37.5	35.5	36.5	36.6	42.1
20256	2009/04/01	16:58:33	35.1	38.5	37.0	34.5	37.4
20261	2009/04/01	16:58:48	34.0	34.6	39.7	36.5	35.6
20266	2009/04/01	16:59:03	34.7	36.5	35.9	34.3	36.6
20271	2009/04/01	16:59:18	35.6	38.5	45.7	50.1	61.0
20276	2009/04/01	16:59:33	67.3	73.8	60.3	53.5	53.2
20281	2009/04/01	16:59:48	42.3	40.6	40.6	34.7	33.8
20286	2009/04/01	17:00:03	36.4	35.1	34.5	34.3	34.4
20291	2009/04/01	17:00:18	34.8	33.7	33.9	33.9	33.8
20296	2009/04/01	17:00:33	36.8	35.1	42.1	35.5	34.4
20301	2009/04/01	17:00:48	34.7	35.1	36.0	36.8	35.2
20306	2009/04/01	17:01:03	34.7	35.9	33.7	37.6	37.1
20311	2009/04/01	17:01:18	37.5	34.5	34.5	36.7	38.3
20316	2009/04/01	17:01:33	35.2	35.6	34.5	33.9	33.7
20321	2009/04/01	17:01:48	34.7	35.1	33.6	35.3	34.0
20326	2009/04/01	17:02:03	34.2	34.4	35.2	34.5	34.4
20331	2009/04/01	17:02:18	36.0	35.0	34.2	34.8	37.7
20336	2009/04/01	17:02:33	35.7	35.3	34.5	36.2	35.1
20341	2009/04/01	17:02:48	34.1	34.8	38.7	39.2	35.4
20346	2009/04/01	17:03:03	40.2	41.9	51.6	59.3	72.7
20351	2009/04/01	17:03:18	63.1	52.0	53.0	40.8	40.2
20356	2009/04/01	17:03:33	35.4	35.5	38.0	46.1	34.6
20361	2009/04/01	17:03:48	33.8	37.8	34.5	38.2	34.1
20366	2009/04/01	17:04:03	35.6	33.7	33.7	34.4	36.3
20371	2009/04/01	17:04:18	37.2	42.5	46.7	56.0	62.2
20376	2009/04/01	17:04:33	74.7	68.6	54.0	52.5	44.1
20381	2009/04/01	17:04:48	42.4	38.5	36.2	37.1	35.0
20386	2009/04/01	17:05:03	35.4	36.2	38.2	35.4	36.2
20391	2009/04/01	17:05:18	35.7	34.6	35.3	35.5	34.2
20396	2009/04/01	17:05:33	47.6	34.8	34.8	34.3	34.5
20401	2009/04/01	17:05:48	33.8	35.0	33.8	34.2	35.6
20406	2009/04/01	17:06:03	33.5	35.1	45.4	37.5	34.7
20411	2009/04/01	17:06:18	38.7	34.6	35.4	34.0	37.5
20416	2009/04/01	17:06:33	34.3	35.6	36.2	35.3	34.0
20421	2009/04/01	17:06:48	42.1	34.0	34.3	34.4	42.0
20426	2009/04/01	17:07:03	36.2	34.3	35.2	34.7	34.6
20431	2009/04/01	17:07:18	34.2	35.0	39.7	41.8	35.7
20436	2009/04/01	17:07:33	37.8	37.9	43.5	49.6	61.0
20441	2009/04/01	17:07:48	68.1	79.3	60.5	57.6	49.6
20446	2009/04/01	17:08:03	44.3	38.9	34.5	34.7	34.8
20451	2009/04/01	17:08:18	35.0	35.3	34.1	36.3	34.4
20456	2009/04/01	17:08:33	34.8	33.7	36.8	35.4	34.5
20461	2009/04/01	17:08:48	34.7	35.9	39.5	41.6	50.1
20466	2009/04/01	17:09:03	58.7	68.2	72.5	56.5	54.1
20471	2009/04/01	17:09:18	48.9	41.7	37.2	34.6	35.9
20476	2009/04/01	17:09:33	35.0	33.6	35.3	33.7	35.2
20481	2009/04/01	17:09:48	34.4	34.3	35.1	34.6	36.4
20486	2009/04/01	17:10:03	35.1	34.5	37.5	36.3	33.9
20491	2009/04/01	17:10:18	33.5	34.9	33.8	35.7	34.4
20496	2009/04/01	17:10:33	35.2	35.5	36.1	34.5	35.3
20501	2009/04/01	17:10:48	37.6	34.9	38.1	36.8	36.0
20506	2009/04/01	17:11:03	35.5	34.9	33.7	40.8	35.1
20511	2009/04/01	17:11:18	35.4	36.9	34.4	35.7	34.7
20516	2009/04/01	17:11:33	44.9	34.7	41.9	35.1	35.0
20521	2009/04/01	17:11:48	35.3	37.7	35.0	35.1	37.3
20526	2009/04/01	17:12:03	34.3	35.8	33.4	39.2	37.3
20531	2009/04/01	17:12:18	34.2	38.8	34.8	37.2	33.8
20536	2009/04/01	17:12:33	34.8	33.4	41.1	35.1	36.9
20541	2009/04/01	17:12:48	40.7	37.7	34.6	35.9	43.7
20546	2009/04/01	17:13:03	34.2	45.0	36.4	35.5	33.6
20551	2009/04/01	17:13:18	34.5	35.3	45.8	40.9	47.9
20556	2009/04/01	17:13:33	58.4	72.0	68.0	54.5	56.2
20561	2009/04/01	17:13:48	42.9	40.5	39.3	35.1	35.5
20566	2009/04/01	17:14:03	34.7	38.4	34.1	35.1	33.8
20571	2009/04/01	17:14:18	33.9	34.2	34.6	34.4	43.5
20576	2009/04/01	17:14:33	35.4	35.8	35.7	34.4	37.7
20581	2009/04/01	17:14:48	34.5	35.4	36.0	42.6	36.9
20586	2009/04/01	17:15:03	33.8	34.8	36.8	37.3	35.3
20591	2009/04/01	17:15:18	34.3	39.5	34.0	34.5	37.1
20596	2009/04/01	17:15:33	35.2	34.6	34.9	34.2	44.7
20601	2009/04/01	17:15:48	33.6	34.9	36.1	39.2	46.0
20606	2009/04/01	17:16:03	53.8	63.3	75.4	64.7	63.1
20611	2009/04/01	17:16:18	49.2	48.5	42.9	35.1	34.8
20616	2009/04/01	17:16:33	39.7	35.5	34.2	34.5	34.9
20621	2009/04/01	17:16:48	34.2	34.4	34.8	33.5	34.7
20626	2009/04/01	17:17:03	38.6	35.5	34.4	36.4	37.5
20631	2009/04/01	17:17:18	39.5	46.5	53.6	53.6	59.1
20636	2009/04/01	17:17:33	72.2	54.7	54.3	47.9	44.1
20641	2009/04/01	17:17:48	48.0	38.3	35.4	34.4	34.2
20646	2009/04/01	17:18:03	37.5	35.2	37.4	33.7	33.8
20651	2009/04/01	17:18:18	33.6	36.0	33.6	35.7	35.5
20656	2009/04/01	17:18:33	33.5	39.7	37.7	37.3	34.2
20661	2009/04/01	17:18:48	38.1	33.4	34.1	37.4	34.5
20666	2009/04/01	17:19:03	46.5	36.5	35.5	38.5	34.7
20671	2009/04/01	17:19:18	35.7	48.2	34.0	34.0	36.3
20676	2009/04/01	17:19:33	38.9	42.7	36.7	37.1	36.8
20681	2009/04/01	17:19:48	40.7	35.6	38.0	44.2	40.7
20686	2009/04/01	17:20:03	46.5	46.5	44.4	46.4	43.9
20691	2009/04/01	17:20:18	46.8	44.9	46.7	46.1	45.0
20696	2009/04/01	17:20:33	48.7	57.2	69.2	74.3	55.0
20701	2009/04/01	17:20:48	54.8	46.4	45.1	43.8	45.2
20706	2009/04/01	17:21:03	41.4	38.4	44.2	36.9	38.1
20711	2009/04/01	17:21:18	40.2	45.9	43.0	35.7	38.0
20716	2009/04/01	17:21:33	46.3	39.2	44.0	45.8	39.2

20721	2009/04/01	17:21:48	37.3	43.0	46.9	44.1	52.5
20726	2009/04/01	17:22:03	57.7	58.1	72.1	74.8	59.2
20731	2009/04/01	17:22:18	51.5	53.5	45.8	46.5	45.2
20736	2009/04/01	17:22:33	51.6	59.7	69.1	78.4	60.1
20741	2009/04/01	17:22:48	59.5	48.0	46.3	50.9	58.1
20746	2009/04/01	17:23:03	65.6	76.7	58.9	57.7	49.2
20751	2009/04/01	17:23:18	47.4	43.0	44.7	38.7	37.6
20756	2009/04/01	17:23:33	38.5	41.2	46.0	38.6	38.3
20761	2009/04/01	17:23:48	43.1	35.7	46.9	37.6	36.8
20766	2009/04/01	17:24:03	37.7	42.7	46.0	39.6	38.4
20771	2009/04/01	17:24:18	41.6	36.5	37.9	38.3	38.3
20776	2009/04/01	17:24:33	43.0	35.3	46.1	37.3	37.7
20781	2009/04/01	17:24:48	42.1	35.9	40.0	37.9	36.6
20786	2009/04/01	17:25:03	48.0	47.2	52.0	58.2	65.8
20791	2009/04/01	17:25:18	75.4	54.3	52.8	45.1	57.0
20796	2009/04/01	17:25:33	52.8	48.9	52.5	47.1	47.1
20801	2009/04/01	17:25:48	44.8	46.9	54.2	41.8	48.2
20806	2009/04/01	17:26:03	54.9	41.3	51.1	43.7	52.1
20811	2009/04/01	17:26:18	45.0	53.3	47.1	39.6	56.7
20816	2009/04/01	17:26:33	42.4	57.5	55.2	52.6	55.1
20821	2009/04/01	17:26:48	53.8	65.1	70.4	58.3	48.1
20826	2009/04/01	17:27:03	59.7	52.6	53.2	45.4	41.4
20831	2009/04/01	17:27:18	46.6	40.9	53.7	40.3	38.6
20836	2009/04/01	17:27:33	44.1	48.3	52.6	50.6	47.8
20841	2009/04/01	17:27:48	52.0	47.9	47.6	56.5	53.7
20846	2009/04/01	17:28:03	59.3	55.8	56.1	57.6	57.6
20851	2009/04/01	17:28:18	54.8	55.1	50.6	47.4	48.4
20856	2009/04/01	17:28:33	54.5	50.8	54.4	59.6	57.8
20861	2009/04/01	17:28:48	46.5	50.2	56.6	55.0	58.3
20866	2009/04/01	17:29:03	55.9	56.6	58.6	52.8	56.0
20871	2009/04/01	17:29:18	42.9	45.7	52.1	57.3	55.9
20876	2009/04/01	17:29:33	63.3	68.3	75.8	57.3	59.6
20881	2009/04/01	17:29:48	53.6	53.5	58.2	53.6	51.7
20886	2009/04/01	17:30:03	60.7	51.7	59.6	51.3	48.7
20891	2009/04/01	17:30:18	57.6	54.5	58.4	54.8	58.7
20896	2009/04/01	17:30:33	62.4	68.1	77.9	68.5	58.9
20901	2009/04/01	17:30:48	60.3	57.1	59.1	70.3	67.7
20906	2009/04/01	17:31:03	62.7	58.7	59.5	54.0	53.9
20911	2009/04/01	17:31:18	55.8	61.5	46.4	56.7	49.3
20916	2009/04/01	17:31:33	54.3	55.1	50.8	55.2	50.3
20921	2009/04/01	17:31:48	52.1	60.0	53.9	52.2	58.0
20926	2009/04/01	17:32:03	57.7	53.3	58.0	53.4	60.4
20931	2009/04/01	17:32:18	61.0	58.3	52.2	52.6	56.3
20936	2009/04/01	17:32:33	52.2	51.2	60.5	54.2	60.8
20941	2009/04/01	17:32:48	63.3	65.8	70.0	59.7	58.0
20946	2009/04/01	17:33:03	54.1	58.4	49.8	53.2	56.8
20951	2009/04/01	17:33:18	51.3	57.5	51.5	54.8	56.3
20956	2009/04/01	17:33:33	58.6	54.1	56.9	59.2	57.8
20961	2009/04/01	17:33:48	54.4	55.0	49.0	51.9	56.3
20966	2009/04/01	17:34:03	47.3	60.2	62.8	58.2	56.4
20971	2009/04/01	17:34:18	60.3	57.4	60.5	59.3	53.0
20976	2009/04/01	17:34:33	54.3	52.5	60.3	56.7	57.2
20981	2009/04/01	17:34:48	56.7	61.2	72.9	57.0	61.5
20986	2009/04/01	17:35:03	53.3	60.9	73.2	60.1	54.4
20991	2009/04/01	17:35:18	58.6	59.5	57.6	53.8	51.5
20996	2009/04/01	17:35:33	55.9	59.2	58.9	54.1	53.8
21001	2009/04/01	17:35:48	53.8	57.1	52.5	57.8	49.0
21006	2009/04/01	17:36:03	55.1	59.4	56.6	55.2	51.0
21011	2009/04/01	17:36:18	59.9	55.3	56.2	57.8	57.5
21016	2009/04/01	17:36:33	57.6	46.8	54.7	53.8	56.3
21021	2009/04/01	17:36:48	49.4	55.6	50.5	58.1	59.6
21026	2009/04/01	17:37:03	49.5	57.7	51.5	42.4	54.9
21031	2009/04/01	17:37:18	58.0	55.2	60.5	55.4	60.1
21036	2009/04/01	17:37:33	69.1	74.2	60.8	53.0	49.3
21041	2009/04/01	17:37:48	51.9	45.1	45.2	41.1	44.6
21046	2009/04/01	17:38:03	43.6	40.9	43.0	54.0	50.1
21051	2009/04/01	17:38:18	55.3	55.8	58.2	52.2	56.1
21056	2009/04/01	17:38:33	50.2	59.4	59.9	71.9	66.3
21061	2009/04/01	17:38:48	54.0	54.9	55.4	52.6	54.8
21066	2009/04/01	17:39:03	48.3	48.0	46.0	48.3	45.0
21071	2009/04/01	17:39:18	44.1	46.9	45.9	50.3	46.3
21076	2009/04/01	17:39:33	52.8	45.4	49.6	46.4	50.9
21081	2009/04/01	17:39:48	46.3	50.0	47.8	48.7	48.0
21086	2009/04/01	17:40:03	45.4	44.9	51.2	55.6	55.0
21091	2009/04/01	17:40:18	63.1	73.5	58.5	52.9	51.3
21096	2009/04/01	17:40:33	54.6	47.1	43.1	48.6	49.2
21101	2009/04/01	17:40:48	48.0	45.4	51.2	44.8	46.9
21106	2009/04/01	17:41:03	48.8	50.6	51.0	51.9	50.6
21111	2009/04/01	17:41:18	49.6	48.2	48.0	48.9	49.4
21116	2009/04/01	17:41:33	45.5	50.6	46.4	52.4	52.4
21121	2009/04/01	17:41:48	49.7	51.5	44.6	52.6	48.8
21126	2009/04/01	17:42:03	54.1	50.1	53.1	54.1	52.1
21131	2009/04/01	17:42:18	49.0	48.2	49.4	54.1	51.6
21136	2009/04/01	17:42:33	57.9	64.5	77.4	65.2	61.9
21141	2009/04/01	17:42:48	56.1	51.3	50.4	48.0	52.1
21146	2009/04/01	17:43:03	50.9	54.7	53.9	60.8	72.7
21151	2009/04/01	17:43:18	57.0	59.5	57.1	63.3	72.8
21156	2009/04/01	17:43:33	58.5	54.4	52.9	53.4	49.7
21161	2009/04/01	17:43:48	46.7	47.4	47.4	44.2	47.0
21166	2009/04/01	17:44:03	51.1	58.8	68.7	72.2	55.9
21171	2009/04/01	17:44:18	59.0	48.1	48.3	46.1	45.6
21176	2009/04/01	17:44:33	50.0	43.1	56.0	50.8	46.9
21181	2009/04/01	17:44:48	46.5	50.0	51.7	53.4	54.0
21186	2009/04/01	17:45:03	52.5	49.3	45.6	51.0	51.9
21191	2009/04/01	17:45:18	49.5	51.3	48.6	51.6	48.6
21196	2009/04/01	17:45:33	46.4	47.1	47.3	47.8	48.2
21201	2009/04/01	17:45:48	49.9	52.0	50.7	50.8	52.6
21206	2009/04/01	17:46:03	50.2	52.6	52.6	48.6	44.6
21211	2009/04/01	17:46:18	56.2	43.3	46.2	46.0	47.9

21216	2009/04/01	17:46:33	54.2	47.1	48.6	48.3	52.8
21221	2009/04/01	17:46:48	46.7	54.6	48.1	53.9	49.0
21226	2009/04/01	17:47:03	47.8	48.9	51.5	45.7	47.8
21231	2009/04/01	17:47:18	50.3	50.0	51.9	50.3	49.0
21236	2009/04/01	17:47:33	52.2	50.3	48.5	56.2	55.4
21241	2009/04/01	17:47:48	53.2	45.7	55.2	51.4	52.4
21246	2009/04/01	17:48:03	54.7	56.3	54.4	59.0	56.4
21251	2009/04/01	17:48:18	58.0	78.7	67.7	71.9	77.5
21256	2009/04/01	17:48:33	58.9	63.3	59.9	58.8	54.4
21261	2009/04/01	17:48:48	60.1	51.2	59.0	46.6	45.0
21266	2009/04/01	17:49:03	47.1	43.3	46.9	48.9	50.2
21271	2009/04/01	17:49:18	50.0	59.9	63.1	74.7	65.6
21276	2009/04/01	17:49:33	70.5	60.0	56.6	52.4	48.8
21281	2009/04/01	17:49:48	49.4	50.9	51.8	51.2	49.6
21286	2009/04/01	17:50:03	53.0	64.8	67.7	78.6	59.2
21291	2009/04/01	17:50:18	57.6	52.4	45.7	46.1	44.1
21296	2009/04/01	17:50:33	44.7	47.7	42.8	45.7	46.9
21301	2009/04/01	17:50:48	47.6	45.4	50.5	46.6	47.3
21306	2009/04/01	17:51:03	47.0	51.0	51.5	56.6	62.6
21311	2009/04/01	17:51:18	73.7	63.9	56.7	53.8	50.3
21316	2009/04/01	17:51:33	47.9	51.4	49.1	48.8	46.3
21321	2009/04/01	17:51:48	49.7	44.4	47.8	42.8	46.7
21326	2009/04/01	17:52:03	46.7	45.3	45.4	49.5	46.7
21331	2009/04/01	17:52:18	46.8	44.9	49.5	61.2	67.4
21336	2009/04/01	17:52:33	80.7	80.3	63.4	60.5	57.5
21341	2009/04/01	17:52:48	63.3	73.5	70.3	59.8	66.6
21346	2009/04/01	17:53:03	73.0	55.9	55.6	53.7	52.3
21351	2009/04/01	17:53:18	58.7	76.5	62.2	55.4	52.1
21356	2009/04/01	17:53:33	56.7	64.2	76.1	67.2	56.6
21361	2009/04/01	17:53:48	51.8	48.2	51.7	44.0	46.1
21366	2009/04/01	17:54:03	46.7	48.3	48.5	43.3	43.6
21371	2009/04/01	17:54:18	43.3	43.8	46.4	47.0	46.8
21376	2009/04/01	17:54:33	48.2	43.1	45.4	42.9	51.3
21381	2009/04/01	17:54:48	48.5	54.7	62.7	73.1	79.7
21386	2009/04/01	17:55:03	63.4	57.8	59.1	72.1	73.4
21391	2009/04/01	17:55:18	72.1	72.6	71.7	62.4	59.3
21396	2009/04/01	17:55:33	53.1	48.6	50.6	46.7	48.2
21401	2009/04/01	17:55:48	52.3	53.8	51.9	52.7	64.5
21406	2009/04/01	17:56:03	69.5	56.8	53.8	59.2	71.6
21411	2009/04/01	17:56:18	67.6	54.2	54.5	51.6	58.5
21416	2009/04/01	17:56:33	64.2	72.8	73.1	58.8	65.2
21421	2009/04/01	17:56:48	78.2	74.4	68.4	55.7	53.9
21426	2009/04/01	17:57:03	49.6	49.3	46.9	53.0	44.5
21431	2009/04/01	17:57:18	46.9	45.8	47.5	46.4	48.6
21436	2009/04/01	17:57:33	49.7	48.0	43.4	41.7	43.0
21441	2009/04/01	17:57:48	47.5	41.8	47.7	53.3	47.5
21446	2009/04/01	17:58:03	53.6	57.0	53.1	55.7	47.3
21451	2009/04/01	17:58:18	52.7	49.1	50.8	46.9	50.0
21456	2009/04/01	17:58:33	58.6	50.1	45.2	45.7	49.2
21461	2009/04/01	17:58:48	44.0	48.4	43.2	49.6	47.0
21466	2009/04/01	17:59:03	54.2	60.3	71.2	73.3	60.1
21471	2009/04/01	17:59:18	56.9	53.6	52.7	67.7	75.1
21476	2009/04/01	17:59:33	72.7	60.3	61.2	50.0	51.8
21481	2009/04/01	17:59:48	60.4	71.1	66.2	57.3	57.2
21486	2009/04/01	18:00:03	55.6	68.9	66.2	55.3	52.7
21491	2009/04/01	18:00:18	48.9	51.0	50.1	49.9	56.1
21496	2009/04/01	18:00:33	59.0	69.5	75.2	76.4	59.4
21501	2009/04/01	18:00:48	58.7	52.4	50.7	44.6	53.2
21506	2009/04/01	18:01:03	46.6	47.8	48.6	43.7	50.6
21511	2009/04/01	18:01:18	48.9	48.5	61.0	60.6	71.9
21516	2009/04/01	18:01:33	62.2	54.9	54.6	47.2	47.1
21521	2009/04/01	18:01:48	44.5	44.5	42.3	48.4	51.3
21526	2009/04/01	18:02:03	62.2	77.0	75.6	80.0	65.9
21531	2009/04/01	18:02:18	61.2	55.4	52.5	47.9	48.8
21536	2009/04/01	18:02:33	52.6	55.8	64.7	69.3	58.5
21541	2009/04/01	18:02:48	56.0	62.0	74.5	79.9	76.7
21546	2009/04/01	18:03:03	78.7	61.3	58.8	52.2	48.2
21551	2009/04/01	18:03:18	45.6	50.2	42.7	43.0	47.8
21556	2009/04/01	18:03:33	55.5	47.5	52.6	48.5	61.5
21561	2009/04/01	18:03:48	68.0	78.6	82.1	64.7	59.4
21566	2009/04/01	18:04:03	53.8	47.7	55.8	47.0	51.2
21571	2009/04/01	18:04:18	59.2	48.5	52.3	58.5	53.2
21576	2009/04/01	18:04:33	50.9	54.3	58.7	69.0	69.0
21581	2009/04/01	18:04:48	60.7	60.4	49.6	51.1	49.0
21586	2009/04/01	18:05:03	44.4	44.5	47.0	53.3	45.0
21591	2009/04/01	18:05:18	45.9	45.6	54.4	54.2	46.9
21596	2009/04/01	18:05:33	42.0	53.0	51.9	62.6	51.5
21601	2009/04/01	18:05:48	40.7	49.0	56.2	43.9	56.2
21606	2009/04/01	18:06:03	45.5	60.3	49.9	64.5	46.6
21611	2009/04/01	18:06:18	47.8	47.3	47.6	54.7	45.3
21616	2009/04/01	18:06:33	51.7	58.4	49.6	46.4	51.2
21621	2009/04/01	18:06:48	60.0	46.1	45.7	49.5	44.3
21626	2009/04/01	18:07:03	42.7	44.7	44.5	44.6	45.6
21631	2009/04/01	18:07:18	43.7	44.0	45.6	47.8	43.6
21636	2009/04/01	18:07:33	46.1	48.5	55.6	66.2	78.7
21641	2009/04/01	18:07:48	76.1	79.0	74.1	63.7	60.7
21646	2009/04/01	18:08:03	52.2	51.9	49.3	43.6	45.0
21651	2009/04/01	18:08:18	42.8	46.0	46.7	49.4	47.5
21656	2009/04/01	18:08:33	44.8	53.8	62.3	70.1	79.6
21661	2009/04/01	18:08:48	76.7	78.9	63.3	58.0	53.4
21666	2009/04/01	18:09:03	51.1	48.9	46.8	44.2	46.1
21671	2009/04/01	18:09:18	46.4	48.8	47.2	40.4	40.9
21676	2009/04/01	18:09:33	43.7	48.2	47.3	54.3	63.2
21681	2009/04/01	18:09:48	76.0	69.9	58.3	53.8	48.9
21686	2009/04/01	18:10:03	52.2	48.6	53.5	58.8	68.7
21691	2009/04/01	18:10:18	76.2	59.5	65.5	71.9	57.6
21696	2009/04/01	18:10:33	51.6	48.2	52.2	46.8	42.4
21701	2009/04/01	18:10:48	44.9	51.5	54.8	57.7	65.6
21706	2009/04/01	18:11:03	76.2	70.1	70.9	59.0	54.9

21711	2009/04/01	18:11:18	50.6	48.5	45.3	49.7	53.0
21716	2009/04/01	18:11:33	52.6	55.5	64.5	73.4	73.3
21721	2009/04/01	18:11:48	60.7	56.1	51.3	52.4	55.9
21726	2009/04/01	18:12:03	57.1	64.0	72.4	56.5	57.9
21731	2009/04/01	18:12:18	52.4	50.1	49.5	50.1	50.7
21736	2009/04/01	18:12:33	44.9	53.8	54.3	61.1	71.5
21741	2009/04/01	18:12:48	67.0	73.0	72.9	75.8	62.0
21746	2009/04/01	18:13:03	60.1	48.7	45.0	46.9	46.0
21751	2009/04/01	18:13:18	51.4	46.3	47.4	48.6	42.9
21756	2009/04/01	18:13:33	40.2	40.5	43.7	41.8	41.6
21761	2009/04/01	18:13:48	54.0	52.8	44.2	38.4	41.9
21766	2009/04/01	18:14:03	47.3	49.2	49.3	50.3	42.6
21771	2009/04/01	18:14:18	48.4	44.9	52.5	56.2	64.8
21776	2009/04/01	18:14:33	76.1	63.4	58.0	54.7	53.6
21781	2009/04/01	18:14:48	48.0	43.4	45.9	44.5	47.2
21786	2009/04/01	18:15:03	51.4	56.5	59.7	70.9	64.5
21791	2009/04/01	18:15:18	72.4	56.4	58.0	54.6	48.0
21796	2009/04/01	18:15:33	51.7	60.2	62.8	74.0	76.8
21801	2009/04/01	18:15:48	67.6	69.1	78.7	62.7	61.6
21806	2009/04/01	18:16:03	54.9	47.7	48.8	45.4	44.2
21811	2009/04/01	18:16:18	42.6	44.3	46.5	47.1	54.8
21816	2009/04/01	18:16:33	61.3	76.0	63.1	62.3	64.5
21821	2009/04/01	18:16:48	71.6	60.3	55.7	56.4	49.9
21826	2009/04/01	18:17:03	47.5	42.7	40.0	42.5	38.4
21831	2009/04/01	18:17:18	48.8	44.5	51.9	62.7	75.2
21836	2009/04/01	18:17:33	71.0	59.8	56.1	50.4	45.4
21841	2009/04/01	18:17:48	41.8	40.9	44.0	45.1	43.4
21846	2009/04/01	18:18:03	43.5	46.6	48.5	42.1	44.7
21851	2009/04/01	18:18:18	37.2	45.5	48.8	50.6	45.0
21856	2009/04/01	18:18:33	47.9	41.2	45.3	46.2	57.0
21861	2009/04/01	18:18:48	58.8	73.9	65.4	56.3	56.9
21866	2009/04/01	18:19:03	58.0	62.8	74.3	58.7	54.8
21871	2009/04/01	18:19:18	52.2	47.7	49.3	40.2	41.4
21876	2009/04/01	18:19:33	54.0	46.6	46.5	50.8	57.6
21881	2009/04/01	18:19:48	61.8	70.1	61.6	57.9	59.5
21886	2009/04/01	18:20:03	48.8	47.0	41.8	46.6	40.8
21891	2009/04/01	18:20:18	45.8	46.1	47.0	41.0	43.6
21896	2009/04/01	18:20:33	43.5	42.3	43.0	50.5	43.2
21901	2009/04/01	18:20:48	48.2	53.2	52.4	54.5	68.1
21906	2009/04/01	18:21:03	68.2	72.0	64.2	72.4	70.8
21911	2009/04/01	18:21:18	56.8	53.8	51.5	43.1	43.1
21916	2009/04/01	18:21:33	43.4	40.9	38.2	44.2	38.5
21921	2009/04/01	18:21:48	46.3	44.9	38.8	44.5	36.8
21926	2009/04/01	18:22:03	47.1	43.1	43.6	47.3	52.4
21931	2009/04/01	18:22:18	61.0	71.5	73.5	56.9	54.2
21936	2009/04/01	18:22:33	46.5	45.8	45.7	53.1	50.4
21941	2009/04/01	18:22:48	54.9	70.4	64.5	54.7	50.7
21946	2009/04/01	18:23:03	52.9	53.1	54.8	60.2	73.1
21951	2009/04/01	18:23:18	57.8	54.7	49.8	52.2	53.3
21956	2009/04/01	18:23:33	46.3	51.9	53.8	65.8	70.9
21961	2009/04/01	18:23:48	58.3	51.3	45.5	48.0	51.4
21966	2009/04/01	18:24:03	40.5	38.4	42.0	40.0	42.7
21971	2009/04/01	18:24:18	37.1	35.7	47.0	40.9	43.1
21976	2009/04/01	18:24:33	37.0	37.9	39.5	38.2	41.1
21981	2009/04/01	18:24:48	44.7	45.6	52.4	44.9	40.5
21986	2009/04/01	18:25:03	46.2	55.2	50.3	50.1	54.3
21991	2009/04/01	18:25:18	60.8	75.5	68.1	58.6	59.9
21996	2009/04/01	18:25:33	55.5	56.8	60.7	52.0	63.0
22001	2009/04/01	18:25:48	58.4	79.1	78.2	62.9	55.5
22006	2009/04/01	18:26:03	55.6	53.2	60.6	57.0	57.1
22011	2009/04/01	18:26:18	65.7	57.4	50.4	60.0	70.9
22016	2009/04/01	18:26:33	44.5	70.7	70.9	44.4	52.5
22021	2009/04/01	18:26:48	42.9	49.5	39.9	52.8	57.0
22026	2009/04/01	18:27:03	55.2	69.1	66.3	56.9	59.6
22031	2009/04/01	18:27:18	79.1	71.3	59.3	61.0	68.0
22036	2009/04/01	18:27:33	76.3	78.3	62.4	60.7	51.5
22041	2009/04/01	18:27:48	45.9	47.8	45.8	55.1	62.1
22046	2009/04/01	18:28:03	75.6	60.4	57.6	60.0	62.5
22051	2009/04/01	18:28:18	74.3	62.7	60.9	57.7	61.2
22056	2009/04/01	18:28:33	72.3	56.6	59.3	64.6	73.0
22061	2009/04/01	18:28:48	73.2	60.0	65.8	74.3	62.6
22066	2009/04/01	18:29:03	60.6	50.1	49.0	51.0	46.6
22071	2009/04/01	18:29:18	37.7	38.7	40.2	39.8	40.3
22076	2009/04/01	18:29:33	46.2	43.5	43.0	44.2	42.2
22081	2009/04/01	18:29:48	38.4	40.9	44.8	44.2	40.3
22086	2009/04/01	18:30:03	42.4	43.3	48.6	50.3	44.4
22091	2009/04/01	18:30:18	40.5	47.7	40.0	40.9	42.8
22096	2009/04/01	18:30:33	51.0	59.0	57.5	59.5	81.5
22101	2009/04/01	18:30:48	66.2	57.9	51.4	49.3	47.7
22106	2009/04/01	18:31:03	52.0	59.7	69.5	74.8	56.9
22111	2009/04/01	18:31:18	54.5	50.2	60.8	67.1	78.8
22116	2009/04/01	18:31:33	79.8	75.3	66.5	75.0	62.3
22121	2009/04/01	18:31:48	55.6	56.3	46.7	45.4	47.3
22126	2009/04/01	18:32:03	39.3	40.9	42.0	40.1	49.0
22131	2009/04/01	18:32:18	40.9	42.8	42.4	40.9	45.1
22136	2009/04/01	18:32:33	53.5	55.1	57.9	64.1	73.0
22141	2009/04/01	18:32:48	59.0	52.7	46.5	46.2	46.1
22146	2009/04/01	18:33:03	53.8	63.5	77.2	68.4	59.1
22151	2009/04/01	18:33:18	52.6	48.2	46.2	43.8	44.6
22156	2009/04/01	18:33:33	53.5	53.4	60.6	74.3	56.0
22161	2009/04/01	18:33:48	54.1	64.1	74.1	70.5	58.7
22166	2009/04/01	18:34:03	58.8	48.3	46.8	46.0	42.2
22171	2009/04/01	18:34:18	39.9	41.4	40.6	42.6	45.5
22176	2009/04/01	18:34:33	52.9	53.6	60.6	77.0	71.9
22181	2009/04/01	18:34:48	59.0	58.1	55.0	50.0	50.2
22186	2009/04/01	18:35:03	49.3	49.7	52.5	54.1	61.5
22191	2009/04/01	18:35:18	72.9	76.2	74.2	59.7	60.4
22196	2009/04/01	18:35:33	81.8	60.6	55.3	61.1	62.3
22201	2009/04/01	18:35:48	81.5	66.7	73.7	64.0	62.4

22206	2009/04/01	18:36:03	73.9	62.3	72.4	56.7	51.8
22211	2009/04/01	18:36:18	51.7	49.1	52.4	43.8	50.5
22216	2009/04/01	18:36:33	60.6	74.3	70.9	58.3	60.3
22221	2009/04/01	18:36:48	62.3	75.6	80.0	63.4	57.6
22226	2009/04/01	18:37:03	49.5	50.3	48.5	44.2	44.3
22231	2009/04/01	18:37:18	41.6	39.3	48.2	43.4	40.0
22236	2009/04/01	18:37:33	46.8	47.7	51.4	53.6	63.7
22241	2009/04/01	18:37:48	71.9	79.6	74.9	63.3	59.6
22246	2009/04/01	18:38:03	54.8	49.4	46.1	52.3	48.1
22251	2009/04/01	18:38:18	46.6	51.3	45.2	48.9	49.3
22256	2009/04/01	18:38:33	43.9	48.8	51.8	48.3	52.0
22261	2009/04/01	18:38:48	53.7	58.2	68.5	76.1	71.4
22266	2009/04/01	18:39:03	58.5	52.9	52.1	48.4	45.8
22271	2009/04/01	18:39:18	40.7	45.2	54.7	58.6	63.4
22276	2009/04/01	18:39:33	75.4	63.8	60.3	58.8	75.1
22281	2009/04/01	18:39:48	64.2	53.0	50.0	49.7	48.8
22286	2009/04/01	18:40:03	47.0	44.2	48.2	40.3	53.3
22291	2009/04/01	18:40:18	44.0	47.4	54.2	55.5	61.7
22296	2009/04/01	18:40:33	75.1	76.3	67.9	58.8	60.0
22301	2009/04/01	18:40:48	52.5	60.3	71.1	76.2	59.1
22306	2009/04/01	18:41:03	67.8	77.5	78.3	65.5	59.6
22311	2009/04/01	18:41:18	55.6	52.3	61.4	63.3	75.7
22316	2009/04/01	18:41:33	79.5	67.2	59.4	59.1	57.4
22321	2009/04/01	18:41:48	63.0	75.2	63.6	63.7	74.1
22326	2009/04/01	18:42:03	57.7	54.0	55.0	55.6	58.5
22331	2009/04/01	18:42:18	79.4	64.6	55.0	62.8	62.5
22336	2009/04/01	18:42:33	69.9	59.9	55.5	54.9	50.7
22341	2009/04/01	18:42:48	63.1	65.2	73.6	77.3	74.7
22346	2009/04/01	18:43:03	75.9	75.6	63.8	58.4	51.9
22351	2009/04/01	18:43:18	47.2	45.3	41.0	42.6	42.5
22356	2009/04/01	18:43:33	42.1	45.3	46.9	51.0	60.7
22361	2009/04/01	18:43:48	69.6	80.4	78.1	68.2	59.0
22366	2009/04/01	18:44:03	52.6	48.7	49.4	49.1	49.2
22371	2009/04/01	18:44:18	54.1	61.3	73.3	60.7	60.1
22376	2009/04/01	18:44:33	51.5	47.1	47.6	50.2	43.5
22381	2009/04/01	18:44:48	45.8	49.1	53.6	55.1	60.2
22386	2009/04/01	18:45:03	77.6	58.3	55.2	62.0	65.5
22391	2009/04/01	18:45:18	77.7	60.8	62.3	74.8	66.4
22396	2009/04/01	18:45:33	73.2	69.2	55.1	55.4	54.7
22401	2009/04/01	18:45:48	64.5	76.0	77.4	67.7	60.9
22406	2009/04/01	18:46:03	56.6	68.7	67.9	56.4	49.3
22411	2009/04/01	18:46:18	46.6	47.2	43.6	50.3	56.0
22416	2009/04/01	18:46:33	62.9	74.1	68.0	55.4	58.4
22421	2009/04/01	18:46:48	51.7	57.9	70.6	80.1	75.7
22426	2009/04/01	18:47:03	64.9	62.6	54.9	50.8	49.0
22431	2009/04/01	18:47:18	47.9	45.4	43.3	44.9	42.1
22436	2009/04/01	18:47:33	39.7	44.3	46.9	45.0	43.4
22441	2009/04/01	18:47:48	46.1	42.2	42.1	43.9	51.0
22446	2009/04/01	18:48:03	57.3	60.7	66.2	72.0	57.3
22451	2009/04/01	18:48:18	54.1	46.9	48.1	47.3	46.2
22456	2009/04/01	18:48:33	49.5	54.5	56.4	59.0	82.2
22461	2009/04/01	18:48:48	60.9	58.3	52.5	55.4	60.7
22466	2009/04/01	18:49:03	73.6	55.3	55.5	53.9	60.1
22471	2009/04/01	18:49:18	72.1	54.4	53.9	63.4	70.0
22476	2009/04/01	18:49:33	79.3	62.0	61.3	58.5	66.7
22481	2009/04/01	18:49:48	80.8	69.0	76.6	79.1	63.0
22486	2009/04/01	18:50:03	58.9	53.4	49.7	54.6	55.3
22491	2009/04/01	18:50:18	66.0	70.6	75.0	58.4	53.5
22496	2009/04/01	18:50:33	47.9	47.1	51.4	41.0	43.5
22501	2009/04/01	18:50:48	39.4	44.9	37.7	44.5	47.7
22506	2009/04/01	18:51:03	41.3	43.0	51.4	54.0	57.8
22511	2009/04/01	18:51:18	80.7	57.5	54.5	57.7	65.2
22516	2009/04/01	18:51:33	72.2	73.8	63.5	61.5	56.5
22521	2009/04/01	18:51:48	48.7	50.2	49.9	48.2	44.1
22526	2009/04/01	18:52:03	46.2	49.6	63.1	62.0	75.4
22531	2009/04/01	18:52:18	61.5	57.2	64.6	70.9	55.8
22536	2009/04/01	18:52:33	55.5	60.0	65.8	72.7	60.4
22541	2009/04/01	18:52:48	56.4	56.9	47.4	49.8	51.8
22546	2009/04/01	18:53:03	55.2	59.7	70.6	75.1	78.2
22551	2009/04/01	18:53:18	71.1	62.7	59.0	56.8	70.7
22556	2009/04/01	18:53:33	62.4	60.3	65.2	79.4	62.1
22561	2009/04/01	18:53:48	62.2	54.3	53.5	66.5	72.8
22566	2009/04/01	18:54:03	71.9	57.3	53.9	48.4	48.3
22571	2009/04/01	18:54:18	49.9	54.4	62.3	72.0	78.5
22576	2009/04/01	18:54:33	76.4	62.0	57.1	51.5	55.1
22581	2009/04/01	18:54:48	61.3	72.0	62.3	62.7	77.8
22586	2009/04/01	18:55:03	63.9	59.5	51.0	52.2	50.5
22591	2009/04/01	18:55:18	46.4	50.2	52.0	47.9	48.3
22596	2009/04/01	18:55:33	55.0	59.6	64.3	71.1	60.9
22601	2009/04/01	18:55:48	62.0	73.5	77.8	77.5	66.1
22606	2009/04/01	18:56:03	62.1	52.6	47.9	49.3	55.9
22611	2009/04/01	18:56:18	56.7	63.6	77.5	75.7	72.8
22616	2009/04/01	18:56:33	63.2	71.7	77.5	70.0	62.5
22621	2009/04/01	18:56:48	61.3	70.4	61.7	55.5	50.9
22626	2009/04/01	18:57:03	46.0	51.8	51.3	56.4	75.6
22631	2009/04/01	18:57:18	63.0	68.7	68.1	62.7	74.6
22636	2009/04/01	18:57:33	66.3	75.1	62.1	59.4	65.8
22641	2009/04/01	18:57:48	71.2	64.4	70.9	75.8	77.6
22646	2009/04/01	18:58:03	74.0	59.3	56.1	55.0	56.9
22651	2009/04/01	18:58:18	56.0	77.9	66.8	57.0	53.1
22656	2009/04/01	18:58:33	58.7	77.7	71.3	73.0	66.3
22661	2009/04/01	18:58:48	64.8	65.5	55.7	54.2	60.5
22666	2009/04/01	18:59:03	72.6	65.0	75.6	63.9	76.3
22671	2009/04/01	18:59:18	67.5	58.4	54.5	52.1	50.3
22676	2009/04/01	18:59:33	47.5	48.6	47.2	47.7	51.3
22681	2009/04/01	18:59:48	55.6	59.1	82.7	60.5	64.7
22686	2009/04/01	19:00:03	74.0	58.4	61.6	67.0	78.1
22691	2009/04/01	19:00:18	58.6	54.9	49.1	55.1	52.3
22696	2009/04/01	19:00:33	56.3	62.3	71.4	76.9	59.9

22701	2009/04/01	19:00:48	65.6	75.5	78.3	75.6	75.7
22706	2009/04/01	19:01:03	68.0	66.5	73.1	62.0	72.6
22711	2009/04/01	19:01:18	55.9	54.8	49.1	48.8	52.2
22716	2009/04/01	19:01:33	53.8	57.8	71.9	72.8	75.1
22721	2009/04/01	19:01:48	71.7	78.8	73.0	61.6	63.4
22726	2009/04/01	19:02:03	76.2	64.2	75.0	58.4	57.3
22731	2009/04/01	19:02:18	58.1	77.8	66.0	59.0	64.3
22736	2009/04/01	19:02:33	76.7	72.4	69.9	65.0	62.3
22741	2009/04/01	19:02:48	68.7	67.9	59.2	54.7	60.5
22746	2009/04/01	19:03:03	75.1	56.9	59.9	75.3	73.5
22751	2009/04/01	19:03:18	62.5	58.1	51.5	50.6	50.3
22756	2009/04/01	19:03:33	43.9	40.7	45.1	42.5	47.9
22761	2009/04/01	19:03:48	47.2	51.4	54.0	59.7	67.4
22766	2009/04/01	19:04:03	73.9	63.6	56.2	51.6	52.5
22771	2009/04/01	19:04:18	54.4	56.2	68.5	67.7	55.7
22776	2009/04/01	19:04:33	53.5	59.1	77.8	66.3	73.3
22781	2009/04/01	19:04:48	69.7	59.1	54.5	51.1	49.1
22786	2009/04/01	19:05:03	43.3	39.5	38.8	37.0	44.4
22791	2009/04/01	19:05:18	40.4	45.7	47.3	48.6	55.1
22796	2009/04/01	19:05:33	57.6	70.0	71.0	59.2	65.2
22801	2009/04/01	19:05:48	74.6	73.6	98.9	79.8	62.5
22806	2009/04/01	19:06:03	74.3	58.4	53.5	48.8	49.5
22811	2009/04/01	19:06:18	46.6	52.4	52.0	56.9	64.6
22816	2009/04/01	19:06:33	74.9	58.5	60.4	77.7	72.0
22821	2009/04/01	19:06:48	57.3	56.5	55.9	60.9	79.5
22826	2009/04/01	19:07:03	64.5	72.8	80.3	62.1	59.1
22831	2009/04/01	19:07:18	54.3	54.7	63.3	68.0	56.9
22836	2009/04/01	19:07:33	53.0	55.4	70.1	67.1	54.6
22841	2009/04/01	19:07:48	54.6	54.6	57.3	64.5	77.0
22846	2009/04/01	19:08:03	76.9	61.0	60.3	52.7	50.7
22851	2009/04/01	19:08:18	51.5	56.8	63.9	66.7	73.3
22856	2009/04/01	19:08:33	56.0	53.7	48.8	48.3	41.6
22861	2009/04/01	19:08:48	40.8	40.3	40.6	42.3	42.0
22866	2009/04/01	19:09:03	45.6	51.9	53.6	56.7	62.0
22871	2009/04/01	19:09:18	76.1	77.7	69.2	76.9	76.3
22876	2009/04/01	19:09:33	75.8	74.5	68.2	59.1	56.5
22881	2009/04/01	19:09:48	58.7	76.7	68.8	74.9	80.3
22886	2009/04/01	19:10:03	75.0	64.6	60.5	60.1	76.9
22891	2009/04/01	19:10:18	64.3	74.2	59.6	55.9	62.4
22896	2009/04/01	19:10:33	74.7	75.3	77.8	70.2	62.0
22901	2009/04/01	19:10:48	57.4	49.6	47.6	47.1	47.4
22906	2009/04/01	19:11:03	45.0	46.9	49.2	47.2	47.2
22911	2009/04/01	19:11:18	51.3	50.2	49.3	51.1	45.3
22916	2009/04/01	19:11:33	43.9	46.8	45.8	46.3	51.2
22921	2009/04/01	19:11:48	57.9	65.8	77.7	72.7	57.8
22926	2009/04/01	19:12:03	55.6	48.9	46.9	46.3	43.7
22931	2009/04/01	19:12:18	42.1	44.7	47.8	55.8	60.5
22936	2009/04/01	19:12:33	74.5	61.7	58.8	55.0	52.4
22941	2009/04/01	19:12:48	56.7	70.2	67.2	57.0	61.0
22946	2009/04/01	19:13:03	73.2	78.1	78.7	62.1	57.9
22951	2009/04/01	19:13:18	67.3	68.9	60.7	61.1	73.0
22956	2009/04/01	19:13:33	65.3	55.2	53.2	48.3	52.6
22961	2009/04/01	19:13:48	59.2	64.5	75.0	59.2	55.5
22966	2009/04/01	19:14:03	57.7	63.0	74.7	69.5	69.5
22971	2009/04/01	19:14:18	58.8	62.3	77.2	73.1	62.6
22976	2009/04/01	19:14:33	58.6	60.0	52.2	47.6	49.7
22981	2009/04/01	19:14:48	55.6	61.7	69.9	76.5	61.9
22986	2009/04/01	19:15:03	58.7	65.6	78.8	65.4	54.8
22991	2009/04/01	19:15:18	55.7	54.3	61.6	77.9	74.8
22996	2009/04/01	19:15:33	61.8	56.8	53.2	49.6	46.5
23001	2009/04/01	19:15:48	44.7	41.9	44.8	40.6	37.5
23006	2009/04/01	19:16:03	39.1	45.5	38.4	41.6	44.6
23011	2009/04/01	19:16:18	48.5	50.3	53.9	64.8	73.5
23016	2009/04/01	19:16:33	68.4	62.8	77.4	67.9	56.7
23021	2009/04/01	19:16:48	55.8	48.8	47.6	46.4	45.6
23026	2009/04/01	19:17:03	42.0	43.3	49.5	51.8	60.6
23031	2009/04/01	19:17:18	58.6	73.5	71.5	55.5	58.2
23036	2009/04/01	19:17:33	47.8	46.0	46.9	45.9	41.6
23041	2009/04/01	19:17:48	40.6	44.5	43.9	51.5	53.7
23046	2009/04/01	19:18:03	56.5	70.5	74.4	58.4	51.9
23051	2009/04/01	19:18:18	45.1	44.9	45.7	49.5	53.0
23056	2009/04/01	19:18:33	52.6	59.6	72.6	56.9	61.7
23061	2009/04/01	19:18:48	72.0	76.9	74.8	75.4	68.5
23066	2009/04/01	19:19:03	76.9	70.2	74.4	61.4	63.6
23071	2009/04/01	19:19:18	72.8	68.1	63.5	75.8	75.1
23076	2009/04/01	19:19:33	72.9	60.6	66.8	72.8	67.8
23081	2009/04/01	19:19:48	76.8	71.5	67.9	58.5	64.5
23086	2009/04/01	19:20:03	76.7	58.9	55.6	50.4	53.2
23091	2009/04/01	19:20:18	44.7	45.5	49.7	54.9	52.8
23096	2009/04/01	19:20:33	60.9	76.9	59.5	57.2	60.2
23101	2009/04/01	19:20:48	70.2	55.7	57.4	56.8	61.1
23106	2009/04/01	19:21:03	72.8	59.5	65.0	72.8	65.0
23111	2009/04/01	19:21:18	57.6	58.1	78.8	60.5	53.4
23116	2009/04/01	19:21:33	50.8	51.3	50.0	58.6	59.8
23121	2009/04/01	19:21:48	72.3	60.9	55.4	61.3	77.8
23126	2009/04/01	19:22:03	75.6	69.8	61.5	59.5	70.7
23131	2009/04/01	19:22:18	80.0	78.1	62.0	55.8	52.1
23136	2009/04/01	19:22:33	50.4	53.1	52.7	56.5	64.3
23141	2009/04/01	19:22:48	73.8	73.4	76.9	61.8	55.3
23146	2009/04/01	19:23:03	55.1	61.0	76.8	71.1	80.1
23151	2009/04/01	19:23:18	80.2	65.4	57.2	59.0	63.5
23156	2009/04/01	19:23:33	74.3	70.3	56.5	56.5	53.7
23161	2009/04/01	19:23:48	59.8	69.5	70.4	68.3	53.5
23166	2009/04/01	19:24:03	50.1	51.5	55.6	54.1	57.6
23171	2009/04/01	19:24:18	75.2	71.1	61.9	73.3	69.7
23176	2009/04/01	19:24:33	73.4	73.6	68.8	70.3	59.5
23181	2009/04/01	19:24:48	69.5	64.8	56.9	55.5	61.8
23186	2009/04/01	19:25:03	75.1	64.3	68.6	56.2	61.0
23191	2009/04/01	19:25:18	79.9	73.0	60.1	60.1	80.6

23196	2009/04/01	19:25:33	72.8	74.1	71.0	60.3	58.1
23201	2009/04/01	19:25:48	61.1	74.7	59.4	54.6	48.9
23206	2009/04/01	19:26:03	50.0	57.1	58.0	63.7	75.4
23211	2009/04/01	19:26:18	60.6	57.5	55.4	60.9	69.7
23216	2009/04/01	19:26:33	67.7	55.8	51.4	51.3	51.8
23221	2009/04/01	19:26:48	51.3	51.9	52.6	66.0	61.6
23226	2009/04/01	19:27:03	60.1	62.4	74.4	77.2	73.8
23231	2009/04/01	19:27:18	58.7	57.1	49.5	48.3	47.0
23236	2009/04/01	19:27:33	45.9	43.9	42.9	52.6	54.1
23241	2009/04/01	19:27:48	57.4	70.9	65.9	81.3	61.1
23246	2009/04/01	19:28:03	56.4	53.1	53.2	64.7	74.2
23251	2009/04/01	19:28:18	79.7	60.5	62.8	73.7	59.2
23256	2009/04/01	19:28:33	50.4	52.3	49.9	46.1	49.4
23261	2009/04/01	19:28:48	47.8	50.8	52.8	61.5	75.2
23266	2009/04/01	19:29:03	66.9	57.6	58.2	70.3	74.4
23271	2009/04/01	19:29:18	60.5	55.1	51.3	52.3	55.1
23276	2009/04/01	19:29:33	62.1	69.2	77.7	63.7	71.3
23281	2009/04/01	19:29:48	55.4	55.2	50.0	55.0	55.1
23286	2009/04/01	19:30:03	57.8	79.9	62.3	60.4	60.9
23291	2009/04/01	19:30:18	75.5	68.2	77.6	80.3	66.1
23296	2009/04/01	19:30:33	72.3	58.1	56.4	53.3	55.5
23301	2009/04/01	19:30:48	60.9	73.1	73.6	64.4	73.7
23306	2009/04/01	19:31:03	75.3	70.0	74.2	64.3	76.5
23311	2009/04/01	19:31:18	65.9	74.8	63.5	77.6	81.5
23316	2009/04/01	19:31:33	76.4	65.0	64.1	71.8	78.6
23321	2009/04/01	19:31:48	78.1	69.6	57.3	54.7	50.4
23326	2009/04/01	19:32:03	48.5	49.1	47.5	45.7	52.1
23331	2009/04/01	19:32:18	56.3	59.0	80.6	73.4	60.1
23336	2009/04/01	19:32:33	57.2	57.5	66.8	73.5	64.0
23341	2009/04/01	19:32:48	54.7	50.4	49.8	50.9	54.6
23346	2009/04/01	19:33:03	60.0	68.7	71.0	55.9	55.5
23351	2009/04/01	19:33:18	65.1	72.6	61.3	76.2	61.2
23356	2009/04/01	19:33:33	71.1	64.2	74.2	68.7	64.2
23361	2009/04/01	19:33:48	61.8	74.5	68.1	68.4	59.4
23366	2009/04/01	19:34:03	76.8	63.2	77.8	62.6	55.3
23371	2009/04/01	19:34:18	56.7	47.8	46.4	47.0	50.5
23376	2009/04/01	19:34:33	55.7	53.1	59.9	75.9	63.1
23381	2009/04/01	19:34:48	61.9	69.2	68.7	68.0	69.0
23386	2009/04/01	19:35:03	58.9	68.5	75.1	72.1	61.5
23391	2009/04/01	19:35:18	58.2	57.9	78.0	62.0	63.8
23396	2009/04/01	19:35:33	75.7	62.5	60.9	70.7	69.8
23401	2009/04/01	19:35:48	73.9	76.5	76.6	75.2	74.3
23406	2009/04/01	19:36:03	79.5	74.5	73.7	63.3	61.6
23411	2009/04/01	19:36:18	62.0	69.6	77.0	74.7	66.7
23416	2009/04/01	19:36:33	58.4	52.4	49.8	49.8	47.1
23421	2009/04/01	19:36:48	43.8	43.9	44.7	45.5	48.0
23426	2009/04/01	19:37:03	49.9	52.4	53.8	58.6	72.4
23431	2009/04/01	19:37:18	73.9	60.8	69.6	54.4	54.8
23436	2009/04/01	19:37:33	58.3	61.2	69.0	71.1	62.7
23441	2009/04/01	19:37:48	75.1	59.0	56.6	69.8	66.0
23446	2009/04/01	19:38:03	57.1	57.1	64.1	78.3	64.8
23451	2009/04/01	19:38:18	75.2	73.2	75.5	70.7	67.5
23456	2009/04/01	19:38:33	76.0	69.8	70.2	61.8	63.3
23461	2009/04/01	19:38:48	77.4	67.1	75.5	57.4	56.8
23466	2009/04/01	19:39:03	49.4	51.3	52.5	57.1	60.1
23471	2009/04/01	19:39:18	66.4	76.4	74.4	77.1	70.0
23476	2009/04/01	19:39:33	62.3	72.1	71.0	58.3	60.4
23481	2009/04/01	19:39:48	61.5	71.8	71.8	61.7	66.2
23486	2009/04/01	19:40:03	69.2	70.7	72.3	60.9	75.5
23491	2009/04/01	19:40:18	64.5	54.3	52.8	52.6	58.2
23496	2009/04/01	19:40:33	73.9	76.1	63.2	56.7	56.5
23501	2009/04/01	19:40:48	61.8	75.1	75.5	79.1	62.9
23506	2009/04/01	19:41:03	63.0	62.3	71.9	78.4	60.6
23511	2009/04/01	19:41:18	59.9	60.5	74.3	67.0	72.4
23516	2009/04/01	19:41:33	76.0	59.8	62.7	76.6	59.6
23521	2009/04/01	19:41:48	54.7	50.4	55.9	55.0	61.3
23526	2009/04/01	19:42:03	75.5	67.9	59.1	69.5	75.8
23531	2009/04/01	19:42:18	72.0	58.5	57.2	56.5	58.1
23536	2009/04/01	19:42:33	65.4	77.3	65.0	67.7	68.4
23541	2009/04/01	19:42:48	68.0	59.1	65.2	71.9	68.0
23546	2009/04/01	19:43:03	66.4	81.2	68.2	81.7	66.6
23551	2009/04/01	19:43:18	59.9	59.4	67.6	73.5	60.5
23556	2009/04/01	19:43:33	78.2	74.2	68.4	76.4	78.7
23561	2009/04/01	19:43:48	60.5	61.1	72.3	59.8	71.0
23566	2009/04/01	19:44:03	73.9	73.3	60.0	57.5	70.0
23571	2009/04/01	19:44:18	69.3	54.7	54.8	59.2	71.0
23576	2009/04/01	19:44:33	63.2	72.6	69.3	74.0	60.1
23581	2009/04/01	19:44:48	66.2	74.0	76.9	68.5	58.7
23586	2009/04/01	19:45:03	68.2	67.6	58.1	56.9	60.5
23591	2009/04/01	19:45:18	80.9	60.7	58.1	67.4	67.9
23596	2009/04/01	19:45:33	56.3	50.8	51.2	49.1	50.2
23601	2009/04/01	19:45:48	51.7	56.3	78.6	60.1	58.7
23606	2009/04/01	19:46:03	67.6	68.3	71.3	66.5	56.1
23611	2009/04/01	19:46:18	51.4	50.0	50.7	48.7	57.4
23616	2009/04/01	19:46:33	59.7	71.9	71.1	64.3	61.3
23621	2009/04/01	19:46:48	68.9	79.0	65.9	72.5	80.0
23626	2009/04/01	19:47:03	68.2	61.9	56.9	53.2	55.4
23631	2009/04/01	19:47:18	58.2	61.0	76.9	76.3	66.5
23636	2009/04/01	19:47:33	72.3	60.2	55.8	50.5	52.2
23641	2009/04/01	19:47:48	54.4	56.3	66.4	69.0	56.1
23646	2009/04/01	19:48:03	50.6	48.9	59.5	50.3	55.3
23651	2009/04/01	19:48:18	66.0	75.7	79.6	63.8	62.9
23656	2009/04/01	19:48:33	80.2	73.3	80.9	63.8	69.3
23661	2009/04/01	19:48:48	80.7	65.9	73.5	62.9	79.5
23666	2009/04/01	19:49:03	79.1	67.0	63.4	75.3	67.0
23671	2009/04/01	19:49:18	61.6	74.6	71.9	72.2	74.6
23676	2009/04/01	19:49:33	77.4	74.6	77.3	78.0	63.3
23681	2009/04/01	19:49:48	73.6	61.8	58.4	77.3	65.0
23686	2009/04/01	19:50:03	74.5	66.1	59.0	57.8	60.2

23691	2009/04/01	19:50:18	76.3	67.0	81.1	69.6	76.0
23696	2009/04/01	19:50:33	61.4	54.1	49.6	48.8	47.8
23701	2009/04/01	19:50:48	54.8	56.6	59.9	79.9	63.6
23706	2009/04/01	19:51:03	71.4	56.8	57.5	61.2	77.6
23711	2009/04/01	19:51:18	63.8	58.1	50.3	52.4	45.5
23716	2009/04/01	19:51:33	44.6	45.0	46.8	50.7	52.2
23721	2009/04/01	19:51:48	58.3	73.3	56.5	56.8	57.5
23726	2009/04/01	19:52:03	63.2	78.8	75.4	60.4	55.5
23731	2009/04/01	19:52:18	52.2	48.7	53.1	58.6	64.0
23736	2009/04/01	19:52:33	72.0	79.6	65.2	66.9	70.4
23741	2009/04/01	19:52:48	56.5	54.9	56.8	68.4	66.8
23746	2009/04/01	19:53:03	55.9	54.7	66.3	66.2	58.6
23751	2009/04/01	19:53:18	57.1	62.3	74.5	59.2	61.5
23756	2009/04/01	19:53:33	67.2	76.8	74.2	58.3	57.8
23761	2009/04/01	19:53:48	59.3	63.8	75.5	74.9	58.5
23766	2009/04/01	19:54:03	58.7	56.7	67.9	76.8	64.3
23771	2009/04/01	19:54:18	58.7	69.0	66.5	72.1	55.8
23776	2009/04/01	19:54:33	58.1	53.8	60.3	78.5	64.7
23781	2009/04/01	19:54:48	59.4	64.2	72.9	64.0	70.6
23786	2009/04/01	19:55:03	80.2	74.1	66.1	71.6	73.2
23791	2009/04/01	19:55:18	64.1	64.4	72.0	73.5	65.2
23796	2009/04/01	19:55:33	73.1	80.5	70.1	55.9	55.3
23801	2009/04/01	19:55:48	58.5	65.9	66.7	78.5	72.7
23806	2009/04/01	19:56:03	64.5	67.2	67.0	59.0	58.2
23811	2009/04/01	19:56:18	63.2	75.2	60.6	68.1	67.1
23816	2009/04/01	19:56:33	56.4	50.1	47.7	44.8	44.7
23821	2009/04/01	19:56:48	43.7	50.0	51.4	54.0	68.3
23826	2009/04/01	19:57:03	67.0	55.2	55.5	58.5	80.2
23831	2009/04/01	19:57:18	74.4	64.6	70.9	71.3	73.9
23836	2009/04/01	19:57:33	67.4	73.4	71.1	73.8	79.2
23841	2009/04/01	19:57:48	79.9	78.4	67.0	61.2	53.2
23846	2009/04/01	19:58:03	50.9	50.8	48.8	53.8	56.4
23851	2009/04/01	19:58:18	56.3	70.2	68.0	55.5	55.6
23856	2009/04/01	19:58:33	56.4	63.6	71.4	82.8	64.2
23861	2009/04/01	19:58:48	61.6	71.3	67.9	56.3	62.7
23866	2009/04/01	19:59:03	62.3	70.6	75.1	71.6	78.2
23871	2009/04/01	19:59:18	76.8	60.0	61.8	63.3	76.2
23876	2009/04/01	19:59:33	72.9	76.1	61.6	58.2	58.6
23881	2009/04/01	19:59:48	78.3	65.5	62.4	73.4	73.6
23886	2009/04/01	20:00:03	61.7	59.0	56.3	57.7	73.2
23891	2009/04/01	20:00:18	58.1	53.3	46.2	48.0	49.2
23896	2009/04/01	20:00:33	54.7	65.1	77.8	68.7	70.9
23901	2009/04/01	20:00:48	62.0	56.5	56.8	59.3	81.9
23906	2009/04/01	20:01:03	69.6	79.1	76.7	67.9	71.7
23911	2009/04/01	20:01:18	66.9	70.4	57.3	60.6	61.4
23916	2009/04/01	20:01:33	49.2	47.8	46.8	50.1	50.6
23921	2009/04/01	20:01:48	57.6	51.3	49.7	58.5	65.0
23926	2009/04/01	20:02:03	77.2	71.9	64.6	54.0	54.3
23931	2009/04/01	20:02:18	52.6	55.2	60.8	73.9	55.4
23936	2009/04/01	20:02:33	52.6	49.0	56.5	59.9	66.9
23941	2009/04/01	20:02:48	79.3	61.2	63.1	70.6	70.9
23946	2009/04/01	20:03:03	70.0	69.9	71.4	61.1	72.4
23951	2009/04/01	20:03:18	71.4	80.4	67.4	73.4	73.3
23956	2009/04/01	20:03:33	74.1	73.2	73.5	76.5	61.1
23961	2009/04/01	20:03:48	57.8	51.5	49.5	48.0	51.2
23966	2009/04/01	20:04:03	61.8	65.4	78.9	80.9	71.1
23971	2009/04/01	20:04:18	75.0	74.7	75.9	70.9	79.1
23976	2009/04/01	20:04:33	62.5	58.4	77.8	66.6	66.6
23981	2009/04/01	20:04:48	76.5	77.4	74.9	65.5	69.9
23986	2009/04/01	20:05:03	68.1	55.4	52.6	48.0	45.3
23991	2009/04/01	20:05:18	50.2	48.9	57.8	56.4	62.6
23996	2009/04/01	20:05:33	78.0	61.4	58.3	66.7	69.2
24001	2009/04/01	20:05:48	59.6	66.0	77.0	67.3	75.0
24006	2009/04/01	20:06:03	77.4	77.7	75.1	69.0	74.6
24011	2009/04/01	20:06:18	74.7	79.2	61.3	54.8	51.3
24016	2009/04/01	20:06:33	53.6	56.6	71.0	72.9	79.7
24021	2009/04/01	20:06:48	67.7	72.8	76.9	61.3	55.9
24026	2009/04/01	20:07:03	53.9	56.8	64.7	76.5	67.7
24031	2009/04/01	20:07:18	68.5	72.0	72.7	64.3	74.5
24036	2009/04/01	20:07:33	63.5	70.9	76.1	73.6	75.3
24041	2009/04/01	20:07:48	66.8	58.1	58.3	58.9	79.8
24046	2009/04/01	20:08:03	61.9	55.2	58.3	65.3	76.2
24051	2009/04/01	20:08:18	69.3	77.3	62.1	59.1	57.6
24056	2009/04/01	20:08:33	59.6	68.3	83.6	71.2	63.3
24061	2009/04/01	20:08:48	59.9	59.7	63.0	75.7	69.5
24066	2009/04/01	20:09:03	78.3	64.7	73.6	71.4	76.4
24071	2009/04/01	20:09:18	72.4	75.6	61.0	60.0	56.5
24076	2009/04/01	20:09:33	58.8	79.0	66.1	67.1	54.7
24081	2009/04/01	20:09:48	47.0	45.0	45.9	45.7	48.0
24086	2009/04/01	20:10:03	52.1	60.2	71.1	76.1	58.1
24091	2009/04/01	20:10:18	54.1	52.2	47.6	45.6	48.5
24096	2009/04/01	20:10:33	47.2	50.0	52.6	58.5	59.3
24101	2009/04/01	20:10:48	72.0	76.4	69.0	57.1	56.5
24106	2009/04/01	20:11:03	61.7	73.9	77.2	70.9	59.2
24111	2009/04/01	20:11:18	54.9	60.5	71.8	77.7	77.2
24116	2009/04/01	20:11:33	71.4	61.2	61.9	75.0	67.5
24121	2009/04/01	20:11:48	64.0	58.0	51.4	49.6	53.0
24126	2009/04/01	20:12:03	53.8	61.1	74.5	76.5	62.5
24131	2009/04/01	20:12:18	56.1	51.0	49.9	50.2	49.4
24136	2009/04/01	20:12:33	45.8	48.3	43.9	47.9	50.5
24141	2009/04/01	20:12:48	42.7	43.0	50.8	47.5	47.6
24146	2009/04/01	20:13:03	55.1	54.8	64.8	82.3	79.9
24151	2009/04/01	20:13:18	63.8	60.8	59.7	68.1	78.1
24156	2009/04/01	20:13:33	63.9	56.0	51.6	52.8	56.9
24161	2009/04/01	20:13:48	58.5	74.0	62.5	52.5	52.4
24166	2009/04/01	20:14:03	44.7	44.9	40.5	41.3	43.8
24171	2009/04/01	20:14:18	44.5	52.2	53.4	61.7	71.4
24176	2009/04/01	20:14:33	62.8	73.0	67.7	60.5	74.6
24181	2009/04/01	20:14:48	74.1	74.6	78.6	68.6	75.0

24186	2009/04/01	20:15:03	67.6	71.1	73.3	58.1	57.4
24191	2009/04/01	20:15:18	51.4	55.8	58.6	73.2	69.5
24196	2009/04/01	20:15:33	57.5	58.1	70.1	72.5	56.5
24201	2009/04/01	20:15:48	54.9	56.6	59.9	66.4	77.3
24206	2009/04/01	20:16:03	69.4	58.2	57.2	47.9	48.2
24211	2009/04/01	20:16:18	46.7	43.8	47.1	58.5	74.9
24216	2009/04/01	20:16:33	60.7	59.1	47.5	46.3	50.7
24221	2009/04/01	20:16:48	51.6	53.9	64.0	79.1	73.2
24226	2009/04/01	20:17:03	60.8	58.1	58.6	60.0	68.7
24231	2009/04/01	20:17:18	71.4	54.6	50.2	50.5	54.3
24236	2009/04/01	20:17:33	52.8	62.3	76.4	77.1	60.1
24241	2009/04/01	20:17:48	53.7	52.9	53.5	55.2	56.6
24246	2009/04/01	20:18:03	72.9	70.6	54.7	48.3	47.7
24251	2009/04/01	20:18:18	46.7	48.4	41.3	45.3	44.1
24256	2009/04/01	20:18:33	43.5	49.7	55.1	64.4	77.4
24261	2009/04/01	20:18:48	75.1	76.3	62.7	57.1	51.0
24266	2009/04/01	20:19:03	50.2	48.1	46.8	40.6	44.5
24271	2009/04/01	20:19:18	46.2	59.9	63.1	77.9	62.3
24276	2009/04/01	20:19:33	59.6	52.7	53.3	56.9	70.6
24281	2009/04/01	20:19:48	70.5	66.5	76.6	72.2	56.9
24286	2009/04/01	20:20:03	62.8	70.9	77.1	75.2	77.7
24291	2009/04/01	20:20:18	73.6	62.3	56.8	52.1	48.0
24296	2009/04/01	20:20:33	49.4	43.9	42.5	42.8	43.9
24301	2009/04/01	20:20:48	49.8	46.0	47.2	43.3	44.6
24306	2009/04/01	20:21:03	45.5	52.3	54.8	57.8	59.3
24311	2009/04/01	20:21:18	62.3	76.0	68.7	61.6	64.7
24316	2009/04/01	20:21:33	77.6	58.2	60.8	65.4	77.8
24321	2009/04/01	20:21:48	60.5	59.5	51.1	51.8	59.6
24326	2009/04/01	20:22:03	71.1	76.4	74.8	73.2	66.5
24331	2009/04/01	20:22:18	81.4	60.6	58.1	51.7	56.9
24336	2009/04/01	20:22:33	66.2	74.7	56.8	63.9	62.3
24341	2009/04/01	20:22:48	72.7	62.5	60.4	60.9	76.2
24346	2009/04/01	20:23:03	69.0	56.5	57.9	51.1	48.5
24351	2009/04/01	20:23:18	51.5	54.7	55.7	75.4	66.7
24356	2009/04/01	20:23:33	51.9	48.3	44.9	45.2	44.9
24361	2009/04/01	20:23:48	48.9	56.7	62.2	78.1	75.8
24366	2009/04/01	20:24:03	65.2	76.9	64.2	58.8	56.6
24371	2009/04/01	20:24:18	64.1	70.0	54.5	51.3	44.7
24376	2009/04/01	20:24:33	46.6	49.7	53.6	67.2	73.9
24381	2009/04/01	20:24:48	57.3	54.9	62.5	72.7	77.9
24386	2009/04/01	20:25:03	73.0	68.2	67.1	79.1	78.4
24391	2009/04/01	20:25:18	79.1	67.9	64.5	76.2	74.6
24396	2009/04/01	20:25:33	73.3	62.8	58.0	51.5	54.2
24401	2009/04/01	20:25:48	48.7	50.3	49.7	53.6	65.7
24406	2009/04/01	20:26:03	68.4	54.9	52.1	46.9	48.2
24411	2009/04/01	20:26:18	55.6	60.2	74.0	63.4	58.5
24416	2009/04/01	20:26:33	57.1	53.3	52.6	56.9	77.2
24421	2009/04/01	20:26:48	59.8	56.3	61.9	70.3	55.5
24426	2009/04/01	20:27:03	53.7	48.2	43.8	45.3	39.5
24431	2009/04/01	20:27:18	38.6	41.1	37.5	43.6	40.9
24436	2009/04/01	20:27:33	39.2	40.9	43.9	50.0	58.9
24441	2009/04/01	20:27:48	72.5	76.3	68.8	60.5	60.7
24446	2009/04/01	20:28:03	64.4	76.5	80.5	63.1	64.3
24451	2009/04/01	20:28:18	56.6	50.8	49.4	53.2	60.1
24456	2009/04/01	20:28:33	61.3	75.1	67.4	72.1	57.3
24461	2009/04/01	20:28:48	51.9	51.1	45.5	42.6	43.1
24466	2009/04/01	20:29:03	45.7	54.5	56.2	69.0	77.5
24471	2009/04/01	20:29:18	64.9	66.2	68.4	53.5	51.0
24476	2009/04/01	20:29:33	47.4	46.5	43.2	40.2	43.4
24481	2009/04/01	20:29:48	42.9	43.4	47.2	43.6	42.6
24486	2009/04/01	20:30:03	41.9	43.0	42.6	40.8	45.5
24491	2009/04/01	20:30:18	44.3	49.0	54.5	59.7	78.4
24496	2009/04/01	20:30:33	57.7	56.8	55.3	57.2	67.9
24501	2009/04/01	20:30:48	70.1	55.8	50.3	52.1	55.1
24506	2009/04/01	20:31:03	60.3	70.9	76.3	59.9	63.5
24511	2009/04/01	20:31:18	74.9	77.1	75.5	69.4	78.7
24516	2009/04/01	20:31:33	61.2	54.2	52.7	53.3	54.9
24521	2009/04/01	20:31:48	54.4	60.0	75.9	71.5	74.9
24526	2009/04/01	20:32:03	73.8	64.3	55.9	55.5	51.8
24531	2009/04/01	20:32:18	44.6	42.2	42.8	43.1	47.2
24536	2009/04/01	20:32:33	54.0	54.2	63.5	73.2	56.2
24541	2009/04/01	20:32:48	50.3	49.2	49.9	45.0	42.7
24546	2009/04/01	20:33:03	39.6	39.9	38.4	43.4	39.6
24551	2009/04/01	20:33:18	43.0	42.3	45.4	46.4	51.2
24556	2009/04/01	20:33:33	55.1	67.5	83.7	62.0	53.5
24561	2009/04/01	20:33:48	51.0	62.8	67.5	79.5	62.3
24566	2009/04/01	20:34:03	66.4	79.3	62.5	75.5	70.9
24571	2009/04/01	20:34:18	59.4	54.0	48.0	51.5	51.5
24576	2009/04/01	20:34:33	57.7	79.8	64.6	76.0	74.6
24581	2009/04/01	20:34:48	66.3	68.8	80.1	61.6	58.6
24586	2009/04/01	20:35:03	54.9	51.5	58.5	71.2	70.1
24591	2009/04/01	20:35:18	72.4	53.3	52.0	61.1	62.4
24596	2009/04/01	20:35:33	73.2	69.6	67.5	80.5	67.9
24601	2009/04/01	20:35:48	63.3	58.9	62.5	73.5	59.0
24606	2009/04/01	20:36:03	57.0	50.6	53.9	54.9	56.6
24611	2009/04/01	20:36:18	64.6	69.3	54.5	58.1	46.0
24616	2009/04/01	20:36:33	50.2	47.2	43.8	50.1	51.9
24621	2009/04/01	20:36:48	54.0	69.7	62.0	55.0	56.4
24626	2009/04/01	20:37:03	73.0	65.5	54.5	51.5	47.2
24631	2009/04/01	20:37:18	47.1	44.3	43.4	46.4	48.0
24636	2009/04/01	20:37:33	60.1	64.0	74.8	62.7	68.5
24641	2009/04/01	20:37:48	75.4	77.8	69.8	61.5	64.3
24646	2009/04/01	20:38:03	58.9	63.3	76.1	58.2	59.3
24651	2009/04/01	20:38:18	48.3	43.0	42.8	47.6	56.3
24656	2009/04/01	20:38:33	60.5	68.6	72.2	61.8	73.8
24661	2009/04/01	20:38:48	62.5	56.5	54.9	48.2	44.7
24666	2009/04/01	20:39:03	41.6	47.3	56.0	61.4	75.3
24671	2009/04/01	20:39:18	69.7	66.9	68.0	64.0	76.2
24676	2009/04/01	20:39:33	65.2	58.2	57.1	76.6	60.5

24681	2009/04/01	20:39:48	50.4	50.6	60.1	62.7	76.4
24686	2009/04/01	20:40:03	78.4	62.6	59.6	50.7	47.2
24691	2009/04/01	20:40:18	48.0	45.7	51.6	58.1	69.8
24696	2009/04/01	20:40:33	77.5	60.8	71.4	57.6	51.3
24701	2009/04/01	20:40:48	48.2	46.3	44.4	43.9	44.4
24706	2009/04/01	20:41:03	45.4	45.8	49.3	50.0	53.8
24711	2009/04/01	20:41:18	66.6	67.9	53.0	52.5	48.1
24716	2009/04/01	20:41:33	48.6	48.4	43.3	39.0	39.0
24721	2009/04/01	20:41:48	46.7	46.3	50.2	59.6	73.6
24726	2009/04/01	20:42:03	75.7	73.4	63.2	61.2	57.0
24731	2009/04/01	20:42:18	49.7	47.6	46.5	41.0	40.0
24736	2009/04/01	20:42:33	43.0	49.5	53.8	59.8	71.9
24741	2009/04/01	20:42:48	60.5	62.2	56.7	65.9	69.2
24746	2009/04/01	20:43:03	61.0	52.5	55.1	54.4	59.9
24751	2009/04/01	20:43:18	65.8	77.9	76.8	79.2	65.4
24756	2009/04/01	20:43:33	59.3	58.7	68.9	64.5	54.7
24761	2009/04/01	20:43:48	50.0	49.9	50.4	40.0	39.0
24766	2009/04/01	20:44:03	41.1	42.9	44.6	48.1	53.7
24771	2009/04/01	20:44:18	55.7	80.5	58.5	53.7	57.0
24776	2009/04/01	20:44:33	73.4	55.5	47.1	45.7	44.2
24781	2009/04/01	20:44:48	43.8	42.7	39.9	40.4	48.3
24786	2009/04/01	20:45:03	52.5	50.2	57.5	77.3	60.9
24791	2009/04/01	20:45:18	52.2	49.8	47.9	54.7	59.0
24796	2009/04/01	20:45:33	70.5	73.2	74.9	77.0	66.8
24801	2009/04/01	20:45:48	58.3	57.0	49.3	46.4	41.7
24806	2009/04/01	20:46:03	44.1	42.2	42.8	51.1	58.6
24811	2009/04/01	20:46:18	59.7	64.7	73.0	58.3	71.1
24816	2009/04/01	20:46:33	57.2	52.0	56.8	57.6	71.2
24821	2009/04/01	20:46:48	75.6	65.5	53.5	59.6	69.7
24826	2009/04/01	20:47:03	76.9	68.8	58.6	63.1	71.7
24831	2009/04/01	20:47:18	79.7	66.9	62.9	68.7	58.3
24836	2009/04/01	20:47:33	51.5	48.8	46.3	46.9	46.7
24841	2009/04/01	20:47:48	38.9	37.4	39.5	42.0	39.6
24846	2009/04/01	20:48:03	43.3	42.8	51.8	58.2	72.3
24851	2009/04/01	20:48:18	59.2	53.9	48.1	46.7	42.9
24856	2009/04/01	20:48:33	43.9	39.2	44.4	39.8	43.1
24861	2009/04/01	20:48:48	45.4	43.7	41.6	44.9	46.7
24866	2009/04/01	20:49:03	51.5	55.3	60.4	70.3	52.8
24871	2009/04/01	20:49:18	49.4	43.3	48.7	45.9	38.5
24876	2009/04/01	20:49:33	47.0	40.7	40.9	45.8	49.9
24881	2009/04/01	20:49:48	50.1	55.0	70.2	74.5	64.2
24886	2009/04/01	20:50:03	55.7	53.0	51.2	46.6	41.6
24891	2009/04/01	20:50:18	48.1	46.1	44.5	48.6	49.7
24896	2009/04/01	20:50:33	61.2	63.7	77.0	76.0	79.1
24901	2009/04/01	20:50:48	76.2	67.4	78.8	63.7	58.0
24906	2009/04/01	20:51:03	56.9	52.7	50.8	51.4	54.2
24911	2009/04/01	20:51:18	66.9	69.6	57.3	55.4	58.4
24916	2009/04/01	20:51:33	72.4	67.8	54.3	49.5	45.7
24921	2009/04/01	20:51:48	45.8	45.6	52.4	56.2	59.8
24926	2009/04/01	20:52:03	67.7	73.9	67.6	56.2	56.1
24931	2009/04/01	20:52:18	52.1	43.5	44.0	44.9	53.7
24936	2009/04/01	20:52:33	60.1	62.5	81.0	76.1	76.0
24941	2009/04/01	20:52:48	77.5	76.9	66.7	63.3	59.4
24946	2009/04/01	20:53:03	71.1	66.9	76.1	77.3	73.3
24951	2009/04/01	20:53:18	61.1	56.1	48.9	53.7	58.1
24956	2009/04/01	20:53:33	57.5	69.7	71.7	59.0	69.4
24961	2009/04/01	20:53:48	74.5	60.1	70.8	61.3	54.5
24966	2009/04/01	20:54:03	54.8	46.4	44.4	47.8	49.3
24971	2009/04/01	20:54:18	52.9	61.0	56.1	45.4	46.6
24976	2009/04/01	20:54:33	49.8	55.8	63.3	76.4	71.6
24981	2009/04/01	20:54:48	56.1	60.6	60.7	73.4	67.6
24986	2009/04/01	20:55:03	62.3	72.4	56.7	54.9	60.0
24991	2009/04/01	20:55:18	72.3	58.8	58.3	61.7	77.6
24996	2009/04/01	20:55:33	78.8	64.5	73.0	76.6	58.9
25001	2009/04/01	20:55:48	58.6	52.3	47.3	43.7	46.1
25006	2009/04/01	20:56:03	44.0	44.9	47.1	53.9	52.0
25011	2009/04/01	20:56:18	57.1	70.9	68.0	55.6	50.5
25016	2009/04/01	20:56:33	51.8	52.8	61.6	72.1	76.2
25021	2009/04/01	20:56:48	63.1	57.9	49.3	49.0	44.3
25026	2009/04/01	20:57:03	46.9	52.0	52.1	60.4	71.5
25031	2009/04/01	20:57:18	57.2	51.8	47.8	49.6	50.2
25036	2009/04/01	20:57:33	50.5	42.0	42.2	50.7	42.9
25041	2009/04/01	20:57:48	50.0	47.9	49.5	52.1	61.1
25046	2009/04/01	20:58:03	66.2	76.4	77.9	71.8	69.3
25051	2009/04/01	20:58:18	59.4	56.2	55.6	56.4	52.7
25056	2009/04/01	20:58:33	52.7	59.0	69.3	77.4	57.3
25061	2009/04/01	20:58:48	56.4	57.1	62.8	72.2	61.8
25066	2009/04/01	20:59:03	59.7	69.4	75.6	79.3	60.9
25071	2009/04/01	20:59:18	60.2	56.2	58.5	82.0	59.0
25076	2009/04/01	20:59:33	55.1	56.0	58.5	70.6	74.6
25081	2009/04/01	20:59:48	57.9	56.7	52.4	45.2	51.1
25086	2009/04/01	21:00:03	43.1	49.5	47.5	44.2	48.3
25091	2009/04/01	21:00:18	53.1	48.6	50.1	44.5	54.7
25096	2009/04/01	21:00:33	45.6	47.5	44.9	50.5	42.5
25101	2009/04/01	21:00:48	43.5	50.3	52.8	61.3	73.8
25106	2009/04/01	21:01:03	73.6	71.8	61.7	53.4	53.2
25111	2009/04/01	21:01:18	55.6	57.5	76.1	78.7	76.5
25116	2009/04/01	21:01:33	75.8	74.3	76.7	71.8	67.2
25121	2009/04/01	21:01:48	59.9	65.2	71.9	58.5	54.8
25126	2009/04/01	21:02:03	54.7	58.9	55.8	62.6	79.5
25131	2009/04/01	21:02:18	63.3	59.2	54.8	54.7	54.0
25136	2009/04/01	21:02:33	66.7	65.8	52.4	51.5	50.1
25141	2009/04/01	21:02:48	47.9	46.8	46.0	46.0	45.1
25146	2009/04/01	21:03:03	48.0	58.0	63.4	75.6	72.4
25151	2009/04/01	21:03:18	58.7	61.1	50.8	54.1	50.8
25156	2009/04/01	21:03:33	49.9	51.3	53.9	53.5	61.1
25161	2009/04/01	21:03:48	74.4	74.3	59.1	61.6	71.4
25166	2009/04/01	21:04:03	76.8	73.3	74.5	57.9	57.5
25171	2009/04/01	21:04:18	49.6	54.2	55.5	54.2	58.7

25176	2009/04/01	21:04:33	65.7	79.4	76.8	69.3	55.9
25181	2009/04/01	21:04:48	53.0	53.1	54.6	55.0	59.8
25186	2009/04/01	21:05:03	72.9	70.9	76.5	61.4	56.5
25191	2009/04/01	21:05:18	52.2	52.4	56.5	49.3	54.4
25196	2009/04/01	21:05:33	61.2	72.7	79.5	73.0	75.5
25201	2009/04/01	21:05:48	71.5	60.3	58.5	54.4	61.0
25206	2009/04/01	21:06:03	61.3	72.1	60.5	58.9	47.5
25211	2009/04/01	21:06:18	46.8	47.4	47.5	42.8	40.7
25216	2009/04/01	21:06:33	47.4	53.2	58.9	72.0	67.9
25221	2009/04/01	21:06:48	55.4	57.5	66.9	66.8	66.8
25226	2009/04/01	21:07:03	64.6	59.5	77.3	71.4	66.2
25231	2009/04/01	21:07:18	71.6	60.4	56.7	49.1	49.1
25236	2009/04/01	21:07:33	46.1	47.4	52.9	59.9	73.5
25241	2009/04/01	21:07:48	69.2	55.3	56.3	55.7	65.1
25246	2009/04/01	21:08:03	69.3	67.6	54.4	56.4	47.9
25251	2009/04/01	21:08:18	47.6	52.2	60.5	74.7	68.5
25256	2009/04/01	21:08:33	60.9	71.7	55.1	52.5	47.0
25261	2009/04/01	21:08:48	46.7	53.0	59.5	63.9	72.3
25266	2009/04/01	21:09:03	61.6	60.7	61.6	75.1	61.9
25271	2009/04/01	21:09:18	60.3	49.6	50.3	46.6	53.2
25276	2009/04/01	21:09:33	48.1	44.1	47.6	50.9	57.4
25281	2009/04/01	21:09:48	62.3	77.3	67.5	54.9	53.0
25286	2009/04/01	21:10:03	47.6	48.6	49.4	60.2	56.0
25291	2009/04/01	21:10:18	63.9	74.0	59.0	53.3	52.5
25296	2009/04/01	21:10:33	50.1	54.0	59.4	62.5	75.6
25301	2009/04/01	21:10:48	74.7	59.3	58.5	50.9	46.7
25306	2009/04/01	21:11:03	47.5	46.9	47.8	43.8	40.4
25311	2009/04/01	21:11:18	43.2	44.1	41.6	45.7	48.0
25316	2009/04/01	21:11:33	55.4	62.0	71.0	73.9	75.1
25321	2009/04/01	21:11:48	59.6	58.5	72.2	68.1	65.5
25326	2009/04/01	21:12:03	56.4	53.0	54.4	55.0	58.0
25331	2009/04/01	21:12:18	67.6	71.8	57.0	53.0	52.5
25336	2009/04/01	21:12:33	58.0	72.0	54.6	54.5	52.6
25341	2009/04/01	21:12:48	60.2	70.7	73.5	64.8	77.5
25346	2009/04/01	21:13:03	69.6	64.9	75.2	63.5	59.9
25351	2009/04/01	21:13:18	51.5	54.7	60.4	72.7	74.8
25356	2009/04/01	21:13:33	74.4	74.4	76.3	64.5	72.1
25361	2009/04/01	21:13:48	74.0	77.7	60.7	56.3	52.2
25366	2009/04/01	21:14:03	51.1	52.5	64.2	69.3	55.4
25371	2009/04/01	21:14:18	49.8	47.3	47.4	50.3	51.3
25376	2009/04/01	21:14:33	58.7	59.0	65.3	66.8	54.8
25381	2009/04/01	21:14:48	47.2	48.3	43.5	44.9	46.6
25386	2009/04/01	21:15:03	46.5	39.6	44.1	44.5	48.3
25391	2009/04/01	21:15:18	54.9	59.5	72.8	63.8	56.9
25396	2009/04/01	21:15:33	58.7	60.6	74.8	66.6	71.0
25401	2009/04/01	21:15:48	79.4	70.8	75.2	73.4	60.7
25406	2009/04/01	21:16:03	64.9	65.9	54.7	48.3	50.8
25411	2009/04/01	21:16:18	54.1	54.2	59.2	72.8	60.1
25416	2009/04/01	21:16:33	68.5	80.4	62.0	61.3	51.9
25421	2009/04/01	21:16:48	49.5	47.5	43.5	41.6	39.4
25426	2009/04/01	21:17:03	51.8	42.9	39.0	45.1	38.7
25431	2009/04/01	21:17:18	41.7	42.9	46.1	53.1	55.5
25436	2009/04/01	21:17:33	61.5	79.0	78.6	74.7	65.0
25441	2009/04/01	21:17:48	60.8	54.0	50.8	49.8	57.6
25446	2009/04/01	21:18:03	56.8	61.7	76.9	68.1	69.5
25451	2009/04/01	21:18:18	73.4	55.5	51.2	49.4	46.9
25456	2009/04/01	21:18:33	48.0	46.4	44.4	45.1	47.6
25461	2009/04/01	21:18:48	57.7	64.1	76.0	67.5	57.7
25466	2009/04/01	21:19:03	59.4	53.7	55.1	70.2	63.2
25471	2009/04/01	21:19:18	51.4	51.6	48.5	44.7	54.3
25476	2009/04/01	21:19:33	42.2	43.2	39.1	44.7	40.3
25481	2009/04/01	21:19:48	49.2	43.8	41.6	45.6	43.5
25486	2009/04/01	21:20:03	43.0	52.7	52.5	58.0	69.8
25491	2009/04/01	21:20:18	73.8	58.7	52.7	47.4	48.2
25496	2009/04/01	21:20:33	47.0	44.6	42.1	43.1	44.4
25501	2009/04/01	21:20:48	44.2	55.4	39.1	44.4	39.6
25506	2009/04/01	21:21:03	44.7	45.8	52.8	56.4	72.2
25511	2009/04/01	21:21:18	75.9	58.9	62.3	75.0	57.3
25516	2009/04/01	21:21:33	55.2	54.1	58.4	78.2	66.2
25521	2009/04/01	21:21:48	59.4	64.6	78.5	81.7	75.3
25526	2009/04/01	21:22:03	72.7	76.3	78.0	80.3	64.6
25531	2009/04/01	21:22:18	63.6	71.8	76.7	64.8	58.9
25536	2009/04/01	21:22:33	56.4	55.3	69.5	58.9	48.9
25541	2009/04/01	21:22:48	46.6	42.8	41.6	43.3	41.8
25546	2009/04/01	21:23:03	41.8	39.4	40.4	46.2	49.4
25551	2009/04/01	21:23:18	43.2	40.4	42.7	42.5	46.3
25556	2009/04/01	21:23:33	36.6	36.9	44.3	44.8	40.5
25561	2009/04/01	21:23:48	41.3	41.7	41.8	44.4	42.6
25566	2009/04/01	21:24:03	45.1	51.6	62.1	75.8	65.5
25571	2009/04/01	21:24:18	56.6	58.0	46.6	45.5	46.7
25576	2009/04/01	21:24:33	45.9	45.8	51.0	60.6	74.3
25581	2009/04/01	21:24:48	73.1	71.9	71.5	60.8	59.4
25586	2009/04/01	21:25:03	52.2	47.1	46.7	41.2	41.8
25591	2009/04/01	21:25:18	43.4	41.6	41.8	46.1	41.0
25596	2009/04/01	21:25:33	39.8	44.5	43.9	40.1	44.3
25601	2009/04/01	21:25:48	41.8	50.8	43.3	40.3	47.7
25606	2009/04/01	21:26:03	43.2	48.6	47.2	56.7	57.9
25611	2009/04/01	21:26:18	69.9	58.4	60.1	62.6	72.5
25616	2009/04/01	21:26:33	66.8	77.5	80.6	76.3	64.3
25621	2009/04/01	21:26:48	61.4	52.0	48.4	49.0	47.2
25626	2009/04/01	21:27:03	50.2	51.3	50.2	47.1	49.9
25631	2009/04/01	21:27:18	58.1	52.7	61.8	74.6	67.9
25636	2009/04/01	21:27:33	69.9	58.1	67.7	67.0	66.5
25641	2009/04/01	21:27:48	77.0	59.2	63.4	77.7	63.1
25646	2009/04/01	21:28:03	54.5	49.3	46.3	48.1	44.3
25651	2009/04/01	21:28:18	48.2	52.6	51.0	57.9	68.9
25656	2009/04/01	21:28:33	76.9	71.0	60.7	54.6	47.3
25661	2009/04/01	21:28:48	46.8	52.1	59.3	75.0	62.5
25666	2009/04/01	21:29:03	56.4	56.9	61.7	75.1	65.9

25671	2009/04/01	21:29:18	69.9	61.0	54.2	52.6	46.3
25676	2009/04/01	21:29:33	43.5	46.7	41.1	45.4	44.1
25681	2009/04/01	21:29:48	39.7	39.4	43.8	40.2	43.0
25686	2009/04/01	21:30:03	37.2	37.2	39.3	38.2	40.0
25691	2009/04/01	21:30:18	41.5	49.9	50.8	54.0	67.6
25696	2009/04/01	21:30:33	65.4	50.1	48.8	46.5	50.5
25701	2009/04/01	21:30:48	59.6	59.7	72.0	60.6	59.3
25706	2009/04/01	21:31:03	53.4	45.5	45.2	42.3	39.4
25711	2009/04/01	21:31:18	37.3	55.2	46.4	45.6	46.2
25716	2009/04/01	21:31:33	53.6	53.0	60.7	80.2	74.6
25721	2009/04/01	21:31:48	68.0	69.0	55.4	52.6	50.0
25726	2009/04/01	21:32:03	52.9	52.7	60.8	74.1	58.1
25731	2009/04/01	21:32:18	53.2	46.3	48.7	44.0	38.7
25736	2009/04/01	21:32:33	42.4	40.1	46.0	39.3	39.8
25741	2009/04/01	21:32:48	41.8	41.0	42.6	49.3	49.6
25746	2009/04/01	21:33:03	52.7	65.2	66.0	69.6	55.6
25751	2009/04/01	21:33:18	56.2	73.5	60.8	57.9	67.6
25756	2009/04/01	21:33:33	76.5	57.7	57.2	61.4	73.5
25761	2009/04/01	21:33:48	70.4	75.1	59.6	55.4	49.5
25766	2009/04/01	21:34:03	44.0	42.3	44.0	47.2	48.3
25771	2009/04/01	21:34:18	51.5	60.2	69.1	50.9	48.2
25776	2009/04/01	21:34:33	42.8	44.7	43.6	43.1	38.9
25781	2009/04/01	21:34:48	39.2	46.8	46.6	59.1	61.2
25786	2009/04/01	21:35:03	72.1	65.4	56.0	58.9	53.3
25791	2009/04/01	21:35:18	61.4	70.3	75.1	59.3	54.3
25796	2009/04/01	21:35:33	49.0	47.4	49.0	47.0	40.2
25801	2009/04/01	21:35:48	34.6	39.2	37.6	42.5	42.5
25806	2009/04/01	21:36:03	41.9	43.2	46.1	53.6	59.2
25811	2009/04/01	21:36:18	63.5	75.4	72.7	76.5	67.9
25816	2009/04/01	21:36:33	73.0	63.0	56.9	57.3	48.3
25821	2009/04/01	21:36:48	45.6	43.1	41.2	53.5	39.3
25826	2009/04/01	21:37:03	40.2	41.6	41.4	42.3	48.1
25831	2009/04/01	21:37:18	54.4	64.3	75.5	65.8	56.4
25836	2009/04/01	21:37:33	55.5	67.2	67.1	74.8	67.1
25841	2009/04/01	21:37:48	56.1	54.3	47.7	47.2	51.3
25846	2009/04/01	21:38:03	62.0	66.5	56.2	51.6	46.0
25851	2009/04/01	21:38:18	41.9	42.1	47.1	40.4	39.6
25856	2009/04/01	21:38:33	37.0	40.5	38.5	45.6	51.7
25861	2009/04/01	21:38:48	63.4	74.7	71.1	58.8	60.9
25866	2009/04/01	21:39:03	50.3	42.5	44.9	47.0	44.3
25871	2009/04/01	21:39:18	51.6	51.4	54.9	63.4	78.1
25876	2009/04/01	21:39:33	74.8	65.9	55.9	51.8	46.3
25881	2009/04/01	21:39:48	44.3	51.9	42.7	39.9	43.1
25886	2009/04/01	21:40:03	41.6	37.3	33.6	39.0	45.9
25891	2009/04/01	21:40:18	35.2	49.7	42.9	49.2	59.4
25896	2009/04/01	21:40:33	74.1	76.3	75.8	75.8	76.8
25901	2009/04/01	21:40:48	76.5	75.6	67.7	61.6	59.9
25906	2009/04/01	21:41:03	77.2	67.5	68.8	63.4	71.1
25911	2009/04/01	21:41:18	70.7	56.1	60.7	72.3	67.9
25916	2009/04/01	21:41:33	74.4	76.0	73.9	59.5	56.2
25921	2009/04/01	21:41:48	59.2	68.3	78.2	72.1	63.0
25926	2009/04/01	21:42:03	59.3	53.4	56.3	63.9	74.0
25931	2009/04/01	21:42:18	79.0	68.3	70.8	77.4	66.8
25936	2009/04/01	21:42:33	67.4	74.9	66.3	67.3	57.8
25941	2009/04/01	21:42:48	52.3	51.4	50.1	45.1	43.5
25946	2009/04/01	21:43:03	43.3	42.9	40.4	40.1	42.8
25951	2009/04/01	21:43:18	50.2	46.8	51.9	55.6	64.3
25956	2009/04/01	21:43:33	70.7	70.6	67.2	75.9	67.5
25961	2009/04/01	21:43:48	72.9	63.0	54.1	55.3	47.7
25966	2009/04/01	21:44:03	46.3	44.0	45.2	41.7	43.2
25971	2009/04/01	21:44:18	38.4	44.6	46.0	51.0	56.7
25976	2009/04/01	21:44:33	60.3	73.2	73.0	59.8	57.3
25981	2009/04/01	21:44:48	51.9	48.9	46.8	51.6	64.2
25986	2009/04/01	21:45:03	77.9	62.8	61.0	53.7	49.1
25991	2009/04/01	21:45:18	45.4	45.8	43.5	42.2	45.4
25996	2009/04/01	21:45:33	46.8	52.4	52.3	59.9	76.2
26001	2009/04/01	21:45:48	59.3	62.5	72.0	70.5	57.6
26006	2009/04/01	21:46:03	63.4	67.7	79.4	59.6	58.8
26011	2009/04/01	21:46:18	51.2	47.9	46.9	48.2	52.8
26016	2009/04/01	21:46:33	54.7	60.9	71.8	56.9	58.0
26021	2009/04/01	21:46:48	61.2	73.4	74.7	72.4	69.8
26026	2009/04/01	21:47:03	69.9	59.6	55.5	57.2	74.7
26031	2009/04/01	21:47:18	66.6	55.4	51.3	57.8	61.0
26036	2009/04/01	21:47:33	73.0	70.9	61.6	59.9	61.2
26041	2009/04/01	21:47:48	72.9	60.1	60.8	67.1	77.8
26046	2009/04/01	21:48:03	60.7	57.3	65.6	70.0	73.7
26051	2009/04/01	21:48:18	62.9	53.3	61.9	63.2	74.1
26056	2009/04/01	21:48:33	62.1	57.4	52.7	49.7	52.9
26061	2009/04/01	21:48:48	51.0	41.5	46.7	44.5	48.4
26066	2009/04/01	21:49:03	45.6	48.0	49.7	55.8	64.7
26071	2009/04/01	21:49:18	77.3	58.0	57.3	48.2	48.1
26076	2009/04/01	21:49:33	45.8	44.3	49.8	45.3	48.1
26081	2009/04/01	21:49:48	48.9	53.7	60.3	75.6	69.7
26086	2009/04/01	21:50:03	68.5	58.1	49.9	45.0	48.2
26091	2009/04/01	21:50:18	46.0	46.7	56.1	60.7	78.3
26096	2009/04/01	21:50:33	71.3	58.3	56.3	51.4	56.1
26101	2009/04/01	21:50:48	69.7	64.4	63.7	71.5	57.2
26106	2009/04/01	21:51:03	54.2	46.4	45.5	43.4	48.5
26111	2009/04/01	21:51:18	51.7	41.7	37.8	53.3	45.8
26116	2009/04/01	21:51:33	48.9	51.7	54.6	68.6	77.3
26121	2009/04/01	21:51:48	59.7	66.2	67.3	54.6	48.7
26126	2009/04/01	21:52:03	51.0	50.0	49.0	57.3	66.9
26131	2009/04/01	21:52:18	74.3	56.4	57.8	49.0	49.1
26136	2009/04/01	21:52:33	44.2	45.7	40.5	47.0	48.4
26141	2009/04/01	21:52:48	46.3	46.1	44.6	49.9	50.7
26146	2009/04/01	21:53:03	52.3	59.7	66.0	51.5	55.1
26151	2009/04/01	21:53:18	66.2	76.7	62.2	73.3	79.5
26156	2009/04/01	21:53:33	75.5	77.1	72.0	62.0	71.2
26161	2009/04/01	21:53:48	71.3	57.1	52.2	48.8	53.7

26166	2009/04/01	21:54:03	63.9	67.7	79.4	60.8	60.8
26171	2009/04/01	21:54:18	55.0	59.6	70.2	57.5	54.3
26176	2009/04/01	21:54:33	49.9	50.7	47.4	49.1	41.9
26181	2009/04/01	21:54:48	45.5	43.7	47.0	49.9	55.9
26186	2009/04/01	21:55:03	66.6	76.5	79.0	66.6	72.3
26191	2009/04/01	21:55:18	60.2	56.4	49.4	46.7	50.5
26196	2009/04/01	21:55:33	54.9	54.8	61.0	75.1	59.8
26201	2009/04/01	21:55:48	52.8	48.0	54.6	51.2	53.2
26206	2009/04/01	21:56:03	62.9	69.2	56.6	57.5	62.0
26211	2009/04/01	21:56:18	73.7	56.7	60.0	73.8	58.7
26216	2009/04/01	21:56:33	53.5	51.5	51.2	56.5	61.3
26221	2009/04/01	21:56:48	71.8	74.4	57.9	55.4	49.4
26226	2009/04/01	21:57:03	51.9	51.2	59.6	72.4	57.8
26231	2009/04/01	21:57:18	54.4	48.9	49.6	48.9	44.7
26236	2009/04/01	21:57:33	45.1	43.4	44.0	44.5	46.2
26241	2009/04/01	21:57:48	48.3	53.6	60.0	67.7	75.7
26246	2009/04/01	21:58:03	60.5	54.8	52.5	48.8	46.7
26251	2009/04/01	21:58:18	47.0	45.4	44.9	40.2	42.1
26256	2009/04/01	21:58:33	41.7	42.8	42.6	42.4	47.8
26261	2009/04/01	21:58:48	42.1	42.7	42.2	38.9	43.9
26266	2009/04/01	21:59:03	44.3	43.8	44.0	45.3	45.0
26271	2009/04/01	21:59:18	48.9	48.9	56.6	75.2	56.6
26276	2009/04/01	21:59:33	49.8	48.2	47.5	49.0	50.1
26281	2009/04/01	21:59:48	56.3	70.5	76.6	64.8	59.5
26286	2009/04/01	22:00:03	71.9	58.2	55.1	50.1	49.4
26291	2009/04/01	22:00:18	54.8	59.9	68.0	71.1	54.1
26296	2009/04/01	22:00:33	53.0	53.6	59.2	71.3	76.0
26301	2009/04/01	22:00:48	77.7	66.8	63.1	59.7	70.3
26306	2009/04/01	22:01:03	57.9	52.1	49.3	49.6	57.1
26311	2009/04/01	22:01:18	58.5	69.9	66.0	53.9	49.1
26316	2009/04/01	22:01:33	48.6	45.7	46.7	46.3	55.7
26321	2009/04/01	22:01:48	61.0	70.6	61.9	71.9	64.4
26326	2009/04/01	22:02:03	57.1	56.5	59.8	72.3	55.5
26331	2009/04/01	22:02:18	51.2	48.8	48.0	44.3	45.6
26336	2009/04/01	22:02:33	42.2	47.3	50.0	61.5	78.1
26341	2009/04/01	22:02:48	64.8	60.1	58.9	67.9	60.4
26346	2009/04/01	22:03:03	73.8	65.2	56.7	60.6	64.7
26351	2009/04/01	22:03:18	76.8	63.2	60.4	74.5	62.4
26356	2009/04/01	22:03:33	51.9	50.5	45.0	43.9	42.6
26361	2009/04/01	22:03:48	46.7	52.0	55.3	65.1	66.8
26366	2009/04/01	22:04:03	55.3	51.9	53.8	59.3	71.7
26371	2009/04/01	22:04:18	58.1	62.0	73.1	72.9	60.5
26376	2009/04/01	22:04:33	59.4	62.4	72.3	75.8	58.3
26381	2009/04/01	22:04:48	57.5	59.3	65.2	59.5	51.9
26386	2009/04/01	22:05:03	49.2	48.3	45.5	45.9	51.5
26391	2009/04/01	22:05:18	59.3	71.5	67.0	53.2	52.0
26396	2009/04/01	22:05:33	49.7	53.1	59.1	70.6	75.3
26401	2009/04/01	22:05:48	75.1	66.0	57.5	67.9	74.7
26406	2009/04/01	22:06:03	70.3	57.3	55.0	55.1	50.2
26411	2009/04/01	22:06:18	51.8	55.8	60.8	75.2	78.1
26416	2009/04/01	22:06:33	66.3	59.7	55.1	51.9	49.3
26421	2009/04/01	22:06:48	48.4	47.8	44.2	45.6	42.9
26426	2009/04/01	22:07:03	44.3	42.9	44.4	43.7	44.9
26431	2009/04/01	22:07:18	44.3	41.7	44.3	43.0	42.7
26436	2009/04/01	22:07:33	40.9	45.5	46.7	54.8	61.8
26441	2009/04/01	22:07:48	75.5	68.7	59.2	62.2	63.8
26446	2009/04/01	22:08:03	69.7	74.2	74.3	73.6	73.1
26451	2009/04/01	22:08:18	59.7	58.5	50.9	48.6	46.1
26456	2009/04/01	22:08:33	45.4	43.6	45.1	45.7	46.5
26461	2009/04/01	22:08:48	44.6	44.0	49.2	58.4	63.3
26466	2009/04/01	22:09:03	76.7	65.0	72.5	76.2	74.5
26471	2009/04/01	22:09:18	63.9	58.6	53.0	49.2	46.5
26476	2009/04/01	22:09:33	48.8	47.0	48.0	53.1	59.8
26481	2009/04/01	22:09:48	74.0	62.3	54.1	54.0	48.0
26486	2009/04/01	22:10:03	52.9	58.2	68.3	75.7	69.6
26491	2009/04/01	22:10:18	76.8	60.5	59.5	55.1	57.2
26496	2009/04/01	22:10:33	70.5	70.8	59.1	59.6	71.0
26501	2009/04/01	22:10:48	60.0	53.6	53.0	44.7	42.2
26506	2009/04/01	22:11:03	39.6	43.3	43.2	41.5	44.2
26511	2009/04/01	22:11:18	51.9	57.0	71.5	58.4	54.9
26516	2009/04/01	22:11:33	52.5	48.9	48.7	54.3	55.4
26521	2009/04/01	22:11:48	58.5	80.1	73.6	74.1	59.1
26526	2009/04/01	22:12:03	54.6	51.0	50.3	46.3	44.0
26531	2009/04/01	22:12:18	45.1	41.6	41.2	42.1	42.7
26536	2009/04/01	22:12:33	42.3	43.4	44.9	45.6	53.8
26541	2009/04/01	22:12:48	58.4	73.8	66.0	54.1	54.4
26546	2009/04/01	22:13:03	49.0	47.6	50.8	57.7	71.1
26551	2009/04/01	22:13:18	76.5	60.3	54.5	56.1	49.2
26556	2009/04/01	22:13:33	50.0	57.4	63.4	76.2	61.1
26561	2009/04/01	22:13:48	62.3	72.8	71.4	57.0	59.1
26566	2009/04/01	22:14:03	67.8	78.7	77.1	62.5	59.2
26571	2009/04/01	22:14:18	52.1	49.7	56.6	59.3	63.7
26576	2009/04/01	22:14:33	74.0	59.6	51.6	47.5	45.0
26581	2009/04/01	22:14:48	41.6	41.8	40.9	41.8	43.2
26586	2009/04/01	22:15:03	42.1	39.8	40.0	41.6	41.7
26591	2009/04/01	22:15:18	41.3	42.6	44.2	50.4	48.8
26596	2009/04/01	22:15:33	55.9	75.7	60.3	53.5	50.1
26601	2009/04/01	22:15:48	51.4	52.2	54.7	61.9	72.7
26606	2009/04/01	22:16:03	71.6	66.6	78.0	72.2	58.1
26611	2009/04/01	22:16:18	54.1	48.7	46.9	45.1	44.6
26616	2009/04/01	22:16:33	45.0	44.9	47.3	52.7	57.6
26621	2009/04/01	22:16:48	58.4	72.2	73.8	74.4	56.8
26626	2009/04/01	22:17:03	55.0	52.2	54.0	61.9	72.7
26631	2009/04/01	22:17:18	65.5	53.8	56.6	48.6	49.4
26636	2009/04/01	22:17:33	60.2	70.5	68.1	54.3	54.6
26641	2009/04/01	22:17:48	55.9	63.8	71.9	59.6	53.1
26646	2009/04/01	22:18:03	53.4	48.7	49.1	46.7	46.2
26651	2009/04/01	22:18:18	45.2	50.3	44.5	45.5	44.8
26656	2009/04/01	22:18:33	47.1	46.0	54.1	52.7	53.2

26661	2009/04/01	22:18:48	62.0	68.7	58.5	63.0	68.3
26666	2009/04/01	22:19:03	60.4	70.4	77.1	60.5	56.3
26671	2009/04/01	22:19:18	57.6	61.1	71.9	60.6	56.0
26676	2009/04/01	22:19:33	61.4	58.2	73.1	62.8	56.1
26681	2009/04/01	22:19:48	55.9	49.7	45.6	43.7	46.3
26686	2009/04/01	22:20:03	44.4	45.1	47.1	43.1	42.9
26691	2009/04/01	22:20:18	43.6	42.8	41.9	43.3	43.4
26696	2009/04/01	22:20:33	47.8	52.4	53.0	58.1	63.4
26701	2009/04/01	22:20:48	75.6	70.9	58.4	59.3	58.8
26706	2009/04/01	22:21:03	62.9	73.8	59.4	54.3	49.0
26711	2009/04/01	22:21:18	48.7	43.6	42.9	47.9	42.8
26716	2009/04/01	22:21:33	40.5	41.0	43.0	45.0	50.5
26721	2009/04/01	22:21:48	56.3	66.4	74.9	76.4	72.1
26726	2009/04/01	22:22:03	60.2	56.8	54.7	55.9	56.4
26731	2009/04/01	22:22:18	61.4	73.4	75.5	60.7	55.1
26736	2009/04/01	22:22:33	53.2	51.8	44.9	42.5	42.3
26741	2009/04/01	22:22:48	43.3	45.1	46.8	50.5	60.5
26746	2009/04/01	22:23:03	77.1	71.6	59.5	59.1	52.2
26751	2009/04/01	22:23:18	46.2	46.6	53.8	53.7	57.8
26756	2009/04/01	22:23:33	80.7	68.9	68.7	53.8	48.3
26761	2009/04/01	22:23:48	46.0	44.6	44.8	44.4	46.9
26766	2009/04/01	22:24:03	44.1	45.0	47.8	51.4	53.0
26771	2009/04/01	22:24:18	59.9	74.1	73.8	58.2	54.1
26776	2009/04/01	22:24:33	49.6	47.5	46.0	50.7	56.4
26781	2009/04/01	22:24:48	65.0	79.9	59.1	59.6	49.5
26786	2009/04/01	22:25:03	46.3	44.3	45.5	48.4	45.5
26791	2009/04/01	22:25:18	46.2	44.6	47.9	52.9	59.4
26796	2009/04/01	22:25:33	71.4	66.2	60.8	74.0	75.0
26801	2009/04/01	22:25:48	63.0	58.3	73.4	76.7	76.9
26806	2009/04/01	22:26:03	79.5	74.9	68.9	59.6	53.0
26811	2009/04/01	22:26:18	53.8	54.8	58.5	73.1	78.2
26816	2009/04/01	22:26:33	86.4	76.7	65.9	61.3	72.5
26821	2009/04/01	22:26:48	59.8	57.3	60.5	74.7	57.2
26826	2009/04/01	22:27:03	52.5	48.2	46.8	43.3	43.1
26831	2009/04/01	22:27:18	43.6	49.5	63.6	80.8	65.0
26836	2009/04/01	22:27:33	62.6	52.2	51.5	49.8	45.5
26841	2009/04/01	22:27:48	45.8	48.1	53.9	64.5	76.2
26846	2009/04/01	22:28:03	66.1	71.4	72.4	75.0	79.1
26851	2009/04/01	22:28:18	65.0	59.3	60.9	63.3	77.9
26856	2009/04/01	22:28:33	74.0	73.7	60.4	57.6	52.5
26861	2009/04/01	22:28:48	49.5	51.3	47.6	48.6	49.0
26866	2009/04/01	22:29:03	49.4	53.0	56.5	60.1	73.3
26871	2009/04/01	22:29:18	77.6	72.3	74.7	72.5	76.4
26876	2009/04/01	22:29:33	57.0	52.4	50.5	48.3	49.0
26881	2009/04/01	22:29:48	46.7	60.5	70.3	75.0	55.5
26886	2009/04/01	22:30:03	54.6	53.7	52.8	57.5	77.3
26891	2009/04/01	22:30:18	65.0	56.1	74.7	67.3	59.7
26896	2009/04/01	22:30:33	74.0	75.6	64.4	55.3	57.6
26901	2009/04/01	22:30:48	71.0	58.6	51.3	50.4	50.3
26906	2009/04/01	22:31:03	49.2	50.2	56.2	54.1	57.5
26911	2009/04/01	22:31:18	72.2	65.5	54.2	51.3	47.8
26916	2009/04/01	22:31:33	51.7	48.1	49.4	49.7	47.2
26921	2009/04/01	22:31:48	44.7	46.0	45.8	49.9	49.1
26926	2009/04/01	22:32:03	51.4	50.7	59.4	72.4	58.2
26931	2009/04/01	22:32:18	64.8	79.0	70.9	57.8	55.2
26936	2009/04/01	22:32:33	51.5	51.0	49.8	49.8	50.9
26941	2009/04/01	22:32:48	52.8	53.6	54.6	64.9	74.4
26946	2009/04/01	22:33:03	64.2	56.9	51.9	50.3	51.7
26951	2009/04/01	22:33:18	48.8	45.5	46.4	47.2	50.2
26956	2009/04/01	22:33:33	49.4	46.8	49.0	45.7	44.1
26961	2009/04/01	22:33:48	45.5	47.8	46.3	54.2	59.0
26966	2009/04/01	22:34:03	71.2	74.6	61.1	58.7	68.1
26971	2009/04/01	22:34:18	68.5	61.8	55.2	54.4	52.5
26976	2009/04/01	22:34:33	51.1	50.2	54.7	64.7	75.2
26981	2009/04/01	22:34:48	75.7	61.6	57.0	52.4	56.2
26986	2009/04/01	22:35:03	57.6	74.3	64.9	55.8	53.7
26991	2009/04/01	22:35:18	63.0	69.6	54.2	49.4	46.7
26996	2009/04/01	22:35:33	49.1	47.4	49.3	48.4	52.1
27001	2009/04/01	22:35:48	52.6	52.9	61.0	63.6	52.7
27006	2009/04/01	22:36:03	48.9	48.7	49.2	47.9	49.9
27011	2009/04/01	22:36:18	49.3	53.9	64.1	76.2	64.3
27016	2009/04/01	22:36:33	59.1	56.2	51.9	50.0	49.8
27021	2009/04/01	22:36:48	49.7	52.3	48.7	49.4	48.0
27026	2009/04/01	22:37:03	47.6	47.4	47.8	48.8	48.6
27031	2009/04/01	22:37:18	48.6	50.1	51.0	49.2	52.0
27036	2009/04/01	22:37:33	57.2	51.4	52.6	54.8	64.2
27041	2009/04/01	22:37:48	75.6	69.9	74.8	66.9	71.7
27046	2009/04/01	22:38:03	63.0	59.9	81.5	64.3	75.7
27051	2009/04/01	22:38:18	76.8	61.0	62.4	72.0	75.0
27056	2009/04/01	22:38:33	58.5	57.5	51.9	48.0	47.6
27061	2009/04/01	22:38:48	49.9	54.2	57.7	68.3	66.1
27066	2009/04/01	22:39:03	54.0	53.2	57.2	69.5	66.3
27071	2009/04/01	22:39:18	58.0	51.8	50.1	49.5	53.0
27076	2009/04/01	22:39:33	56.9	66.8	75.6	71.2	59.5
27081	2009/04/01	22:39:48	55.3	53.0	48.2	48.0	49.8
27086	2009/04/01	22:40:03	51.6	59.7	73.7	64.7	62.4
27091	2009/04/01	22:40:18	77.2	67.9	77.8	76.4	67.7
27096	2009/04/01	22:40:33	59.8	60.4	62.7	73.0	62.3
27101	2009/04/01	22:40:48	66.0	75.2	58.2	54.8	52.4
27106	2009/04/01	22:41:03	47.0	46.1	46.7	47.0	45.2
27111	2009/04/01	22:41:18	46.8	46.4	45.2	47.7	51.2
27116	2009/04/01	22:41:33	57.4	59.5	72.6	74.2	65.8
27121	2009/04/01	22:41:48	57.7	54.5	54.4	49.8	51.4
27126	2009/04/01	22:42:03	47.5	47.8	47.0	47.9	57.5
27131	2009/04/01	22:42:18	60.9	72.7	59.6	58.2	58.9
27136	2009/04/01	22:42:33	72.3	77.1	60.3	71.9	74.5
27141	2009/04/01	22:42:48	57.8	57.4	57.0	70.8	54.0
27146	2009/04/01	22:43:03	49.8	48.4	47.6	45.1	45.7
27151	2009/04/01	22:43:18	43.0	44.2	44.7	43.9	42.3

27156	2009/04/01	22:43:33	43.3	46.0	44.6	41.6	43.9
27161	2009/04/01	22:43:48	46.3	48.4	47.0	46.5	48.9
27166	2009/04/01	22:44:03	47.9	46.1	51.5	58.3	73.2
27171	2009/04/01	22:44:18	70.2	77.4	63.2	71.0	74.7
27176	2009/04/01	22:44:33	61.0	59.4	51.6	48.3	51.6
27181	2009/04/01	22:44:48	44.9	43.0	46.0	44.3	43.7
27186	2009/04/01	22:45:03	43.1	47.9	48.6	43.4	45.9
27191	2009/04/01	22:45:18	46.6	45.8	48.0	46.1	44.8
27196	2009/04/01	22:45:33	53.4	56.4	58.9	79.7	73.0
27201	2009/04/01	22:45:48	61.5	57.4	54.6	63.0	72.3
27206	2009/04/01	22:46:03	80.4	62.9	59.8	55.1	53.6
27211	2009/04/01	22:46:18	59.1	70.7	52.2	50.8	49.8
27216	2009/04/01	22:46:33	48.1	47.8	49.1	48.9	50.6
27221	2009/04/01	22:46:48	50.4	53.1	63.8	64.4	53.9
27226	2009/04/01	22:47:03	52.1	50.7	48.1	47.9	47.0
27231	2009/04/01	22:47:18	51.2	46.5	46.5	49.7	51.5
27236	2009/04/01	22:47:33	48.1	54.3	59.3	75.1	64.2
27241	2009/04/01	22:47:48	57.9	60.5	47.9	48.2	47.5
27246	2009/04/01	22:48:03	43.5	50.0	44.8	47.8	43.7
27251	2009/04/01	22:48:18	48.0	48.6	48.5	50.8	49.3
27256	2009/04/01	22:48:33	53.0	56.6	73.3	58.7	49.3
27261	2009/04/01	22:48:48	48.7	45.9	48.2	53.1	51.9
27266	2009/04/01	22:49:03	58.6	74.5	59.2	53.1	49.4
27271	2009/04/01	22:49:18	47.5	49.1	50.4	60.2	69.1
27276	2009/04/01	22:49:33	71.8	58.5	55.8	55.2	56.6
27281	2009/04/01	22:49:48	67.0	66.1	54.5	52.5	50.1
27286	2009/04/01	22:50:03	52.6	62.5	63.2	77.2	66.8
27291	2009/04/01	22:50:18	76.1	74.0	67.3	67.2	61.6
27296	2009/04/01	22:50:33	68.5	81.6	74.8	61.0	56.7
27301	2009/04/01	22:50:48	52.9	59.0	62.7	77.3	57.4
27306	2009/04/01	22:51:03	54.3	45.9	43.5	40.8	43.7
27311	2009/04/01	22:51:18	46.7	46.3	47.4	49.1	49.4
27316	2009/04/01	22:51:33	45.1	44.1	47.4	45.1	49.9
27321	2009/04/01	22:51:48	52.9	52.2	59.1	79.3	66.0
27326	2009/04/01	22:52:03	74.4	78.6	62.2	64.1	72.9
27331	2009/04/01	22:52:18	58.8	78.1	59.6	52.8	50.7
27336	2009/04/01	22:52:33	46.8	47.2	52.5	46.0	42.1
27341	2009/04/01	22:52:48	42.8	43.9	54.3	40.7	45.4
27346	2009/04/01	22:53:03	55.2	43.9	55.4	57.2	58.9
27351	2009/04/01	22:53:18	67.6	76.5	71.4	60.5	54.7
27356	2009/04/01	22:53:33	55.8	56.3	47.1	47.1	47.2
27361	2009/04/01	22:53:48	46.0	46.1	46.9	45.3	46.3
27366	2009/04/01	22:54:03	43.4	43.0	42.9	44.7	46.5
27371	2009/04/01	22:54:18	51.8	63.0	72.7	68.5	55.7
27376	2009/04/01	22:54:33	55.9	47.9	46.6	46.8	45.2
27381	2009/04/01	22:54:48	49.3	44.8	44.5	44.3	52.1
27386	2009/04/01	22:55:03	45.8	47.1	52.5	61.5	73.3
27391	2009/04/01	22:55:18	66.0	54.0	52.9	57.6	46.3
27396	2009/04/01	22:55:33	50.2	59.4	69.5	69.0	62.1
27401	2009/04/01	22:55:48	71.5	77.0	65.9	58.8	54.4
27406	2009/04/01	22:56:03	53.3	51.5	58.4	65.5	72.2
27411	2009/04/01	22:56:18	72.6	63.1	59.2	53.3	50.6
27416	2009/04/01	22:56:33	50.6	51.1	48.6	47.1	46.8
27421	2009/04/01	22:56:48	48.2	49.1	49.6	49.3	46.8
27426	2009/04/01	22:57:03	46.7	44.8	46.6	48.1	50.6
27431	2009/04/01	22:57:18	53.4	52.2	55.6	64.4	70.1
27436	2009/04/01	22:57:33	54.0	55.3	49.8	51.1	52.7
27441	2009/04/01	22:57:48	54.8	65.0	80.1	72.4	79.6
27446	2009/04/01	22:58:03	78.3	65.7	67.4	78.2	63.8
27451	2009/04/01	22:58:18	58.8	56.8	64.3	69.4	54.6
27456	2009/04/01	22:58:33	50.0	47.7	50.9	55.2	62.9
27461	2009/04/01	22:58:48	75.1	58.2	53.5	62.6	70.9
27466	2009/04/01	22:59:03	55.2	48.2	46.6	45.8	45.8
27471	2009/04/01	22:59:18	43.9	45.4	46.0	49.5	55.6
27476	2009/04/01	22:59:33	70.9	69.4	53.8	52.7	49.1
27481	2009/04/01	22:59:48	55.8	54.2	59.8	71.5	53.3
27486	2009/04/01	23:00:03	53.5	48.5	50.0	51.0	49.4
27491	2009/04/01	23:00:18	49.7	45.8	46.0	46.4	47.1
27496	2009/04/01	23:00:33	59.5	62.5	78.1	58.7	61.1
27501	2009/04/01	23:00:48	69.6	77.3	57.8	60.4	72.8
27506	2009/04/01	23:01:03	72.5	78.0	78.2	64.6	62.4
27511	2009/04/01	23:01:18	55.0	50.9	45.9	47.8	48.5
27516	2009/04/01	23:01:33	54.8	60.5	76.2	62.6	54.7
27521	2009/04/01	23:01:48	52.8	46.6	49.0	53.1	56.9
27526	2009/04/01	23:02:03	67.1	66.7	51.6	48.8	47.7
27531	2009/04/01	23:02:18	46.0	45.5	43.9	44.2	42.4
27536	2009/04/01	23:02:33	45.2	51.2	57.0	51.4	57.2
27541	2009/04/01	23:02:48	62.3	74.9	75.8	65.3	55.1
27546	2009/04/01	23:03:03	56.2	59.5	71.4	77.4	60.5
27551	2009/04/01	23:03:18	54.1	56.7	61.2	74.4	71.1
27556	2009/04/01	23:03:33	56.7	56.3	52.9	46.6	48.3
27561	2009/04/01	23:03:48	50.3	50.6	54.3	68.8	67.0
27566	2009/04/01	23:04:03	70.7	55.1	51.8	51.9	48.3
27571	2009/04/01	23:04:18	49.6	47.0	47.6	47.6	46.9
27576	2009/04/01	23:04:33	49.9	51.2	64.1	64.4	75.6
27581	2009/04/01	23:04:48	73.7	61.0	57.0	50.3	52.3
27586	2009/04/01	23:05:03	51.6	47.3	51.6	62.5	65.6
27591	2009/04/01	23:05:18	76.6	62.6	58.8	69.8	63.7
27596	2009/04/01	23:05:33	55.0	56.0	57.8	71.7	62.0
27601	2009/04/01	23:05:48	50.9	52.6	59.3	73.6	65.0
27606	2009/04/01	23:06:03	57.2	59.5	72.5	71.0	54.0
27611	2009/04/01	23:06:18	54.4	46.2	52.5	51.9	60.2
27616	2009/04/01	23:06:33	74.7	59.4	61.7	73.7	65.2
27621	2009/04/01	23:06:48	74.7	69.3	56.9	56.9	51.5
27626	2009/04/01	23:07:03	46.8	46.0	42.3	43.3	43.7
27631	2009/04/01	23:07:18	44.1	45.9	47.3	44.4	45.5
27636	2009/04/01	23:07:33	40.5	49.4	47.4	49.8	51.4
27641	2009/04/01	23:07:48	59.5	78.4	76.1	70.8	52.0
27646	2009/04/01	23:08:03	54.7	53.4	43.2	44.3	42.9

27651	2009/04/01	23:08:18	45.0	43.4	45.2	47.4	47.3
27656	2009/04/01	23:08:33	48.2	47.4	50.2	59.0	69.7
27661	2009/04/01	23:08:48	58.2	64.1	64.3	61.1	69.0
27666	2009/04/01	23:09:03	52.2	51.7	51.0	50.3	55.6
27671	2009/04/01	23:09:18	60.7	74.0	60.5	58.5	51.5
27676	2009/04/01	23:09:33	46.1	43.9	46.9	51.5	50.3
27681	2009/04/01	23:09:48	51.6	59.9	78.9	67.2	69.6
27686	2009/04/01	23:10:03	66.5	55.8	55.2	53.9	64.6
27691	2009/04/01	23:10:18	71.7	66.3	56.9	62.4	72.7
27696	2009/04/01	23:10:33	79.0	68.6	66.0	75.6	81.1
27701	2009/04/01	23:10:48	80.1	66.9	74.0	75.8	61.4
27706	2009/04/01	23:11:03	55.3	52.6	56.4	71.9	67.7
27711	2009/04/01	23:11:18	56.7	59.2	59.0	60.0	62.3
27716	2009/04/01	23:11:33	61.8	57.9	57.4	49.0	49.3
27721	2009/04/01	23:11:48	48.2	52.9	57.0	70.9	70.2
27726	2009/04/01	23:12:03	58.3	55.0	53.2	53.6	52.3
27731	2009/04/01	23:12:18	53.2	58.3	71.5	54.7	52.5
27736	2009/04/01	23:12:33	50.5	49.5	47.3	45.4	45.1
27741	2009/04/01	23:12:48	44.0	49.1	48.9	48.7	51.9
27746	2009/04/01	23:13:03	55.3	62.3	76.3	62.7	55.3
27751	2009/04/01	23:13:18	54.5	51.7	50.1	52.2	53.4
27756	2009/04/01	23:13:33	58.2	67.9	76.7	68.1	55.1
27761	2009/04/01	23:13:48	53.9	49.4	48.4	47.8	46.8
27766	2009/04/01	23:14:03	45.4	45.2	44.1	44.3	45.6
27771	2009/04/01	23:14:18	44.4	45.1	48.1	50.8	52.8
27776	2009/04/01	23:14:33	51.5	54.5	61.0	72.1	59.7
27781	2009/04/01	23:14:48	64.2	73.9	68.5	56.5	55.2
27786	2009/04/01	23:15:03	50.1	48.7	50.8	55.2	64.6
27791	2009/04/01	23:15:18	54.4	51.3	48.4	51.0	54.9
27796	2009/04/01	23:15:33	57.3	68.0	62.1	51.5	50.7
27801	2009/04/01	23:15:48	50.5	47.2	48.0	45.6	48.9
27806	2009/04/01	23:16:03	47.6	46.9	47.5	48.2	47.5
27811	2009/04/01	23:16:18	47.5	47.5	47.5	49.9	48.0
27816	2009/04/01	23:16:33	48.7	46.7	46.1	45.6	46.3
27821	2009/04/01	23:16:48	47.3	54.4	60.6	74.4	67.0
27826	2009/04/01	23:17:03	71.0	70.3	71.7	59.6	54.2
27831	2009/04/01	23:17:18	54.1	57.8	65.3	75.1	58.7
27836	2009/04/01	23:17:33	57.3	62.9	70.8	69.5	57.2
27841	2009/04/01	23:17:48	53.0	53.1	57.7	68.5	73.0
27846	2009/04/01	23:18:03	55.4	54.6	68.5	63.3	52.2
27851	2009/04/01	23:18:18	51.8	46.2	47.9	49.4	50.3
27856	2009/04/01	23:18:33	49.0	48.9	48.6	49.1	50.7
27861	2009/04/01	23:18:48	59.8	59.9	72.7	77.0	67.3
27866	2009/04/01	23:19:03	56.9	57.9	55.2	51.9	51.1
27871	2009/04/01	23:19:18	44.6	49.2	49.5	61.2	65.3
27876	2009/04/01	23:19:33	78.7	59.8	58.3	53.0	58.3
27881	2009/04/01	23:19:48	56.3	62.7	70.6	75.7	61.0
27886	2009/04/01	23:20:03	55.4	50.6	49.1	50.4	47.7
27891	2009/04/01	23:20:18	47.8	47.3	47.1	45.3	48.5
27896	2009/04/01	23:20:33	48.2	48.5	45.5	45.3	46.2
27901	2009/04/01	23:20:48	50.6	55.8	58.2	68.3	70.7
27906	2009/04/01	23:21:03	62.1	53.2	54.7	54.1	58.7
27911	2009/04/01	23:21:18	64.5	70.8	61.0	62.9	74.3
27916	2009/04/01	23:21:33	61.8	54.5	53.8	56.3	58.6
27921	2009/04/01	23:21:48	79.0	59.7	56.2	55.7	55.4
27926	2009/04/01	23:22:03	58.2	56.8	61.8	60.3	55.5
27931	2009/04/01	23:22:18	45.8	46.7	46.4	48.9	49.2
27936	2009/04/01	23:22:33	57.5	77.7	67.8	75.6	73.5
27941	2009/04/01	23:22:48	72.5	70.5	55.8	53.8	53.1
27946	2009/04/01	23:23:03	52.9	53.5	50.9	51.1	47.4
27951	2009/04/01	23:23:18	45.8	45.0	45.1	44.9	42.8
27956	2009/04/01	23:23:33	41.5	41.6	45.2	45.5	46.4
27961	2009/04/01	23:23:48	42.5	40.4	40.4	43.4	46.1
27966	2009/04/01	23:24:03	51.5	56.9	64.5	75.0	71.7
27971	2009/04/01	23:24:18	61.4	78.5	58.4	60.1	72.7
27976	2009/04/01	23:24:33	59.2	71.0	58.2	55.2	50.0
27981	2009/04/01	23:24:48	47.7	49.6	48.9	52.5	57.2
27986	2009/04/01	23:25:03	56.8	59.2	66.3	73.7	69.9
27991	2009/04/01	23:25:18	58.8	55.7	53.8	53.0	52.6
27996	2009/04/01	23:25:33	57.9	57.9	72.1	68.9	61.6
28001	2009/04/01	23:25:48	66.2	75.4	75.8	66.0	61.7
28006	2009/04/01	23:26:03	62.3	79.7	73.0	58.5	53.7
28011	2009/04/01	23:26:18	51.9	48.4	50.4	54.0	58.0
28016	2009/04/01	23:26:33	73.8	68.5	54.5	55.3	50.2
28021	2009/04/01	23:26:48	46.9	46.3	48.6	43.5	46.4
28026	2009/04/01	23:27:03	47.1	46.4	43.7	42.3	43.8
28031	2009/04/01	23:27:18	46.1	51.5	45.0	50.6	52.0
28036	2009/04/01	23:27:33	46.2	48.2	48.9	49.3	49.5
28041	2009/04/01	23:27:48	57.7	69.2	73.5	57.1	53.9
28046	2009/04/01	23:28:03	50.7	48.0	51.0	48.5	47.6
28051	2009/04/01	23:28:18	47.8	48.8	49.2	48.6	48.5
28056	2009/04/01	23:28:33	48.8	48.7	53.5	47.7	49.5
28061	2009/04/01	23:28:48	51.8	60.9	74.5	69.8	72.5
28066	2009/04/01	23:29:03	63.3	58.2	55.5	54.1	58.3
28071	2009/04/01	23:29:18	67.5	73.9	69.0	55.6	54.5
28076	2009/04/01	23:29:33	54.8	56.4	60.6	72.8	56.2
28081	2009/04/01	23:29:48	55.6	55.3	77.5	58.4	52.1
28086	2009/04/01	23:30:03	52.9	52.0	54.9	71.8	54.4
28091	2009/04/01	23:30:18	51.1	58.3	51.2	58.5	79.6
28096	2009/04/01	23:30:33	59.3	56.0	51.6	54.2	56.2
28101	2009/04/01	23:30:48	69.8	73.6	60.3	58.3	64.3
28106	2009/04/01	23:31:03	74.3	58.6	54.8	52.8	50.2
28111	2009/04/01	23:31:18	45.2	49.1	50.9	69.3	64.7
28116	2009/04/01	23:31:33	55.8	54.4	49.8	52.1	49.4
28121	2009/04/01	23:31:48	49.9	50.4	53.1	57.3	70.5
28126	2009/04/01	23:32:03	66.1	60.6	71.2	63.5	53.2
28131	2009/04/01	23:32:18	56.2	49.1	48.7	52.0	56.3
28136	2009/04/01	23:32:33	73.1	67.7	64.6	60.4	56.5
28141	2009/04/01	23:32:48	66.0	67.1	52.6	49.4	48.1

28146	2009/04/01	23:33:03	48.6	46.6	46.2	48.0	50.2
28151	2009/04/01	23:33:18	47.6	46.3	49.3	53.3	54.6
28156	2009/04/01	23:33:33	62.7	79.4	75.2	73.2	56.7
28161	2009/04/01	23:33:48	53.4	54.1	52.3	55.9	67.5
28166	2009/04/01	23:34:03	65.6	53.6	62.6	71.8	80.7
28171	2009/04/01	23:34:18	77.9	77.5	68.1	59.3	54.9
28176	2009/04/01	23:34:33	57.7	57.1	64.2	71.3	73.6
28181	2009/04/01	23:34:48	65.4	58.9	68.2	77.9	65.7
28186	2009/04/01	23:35:03	59.1	55.0	51.3	48.8	48.5
28191	2009/04/01	23:35:18	50.7	47.8	47.4	47.5	48.0
28196	2009/04/01	23:35:33	47.8	48.6	51.5	51.7	54.5
28201	2009/04/01	23:35:48	65.1	66.9	60.1	75.5	57.9
28206	2009/04/01	23:36:03	55.5	51.9	49.7	50.1	49.8
28211	2009/04/01	23:36:18	50.6	49.7	50.2	50.3	50.6
28216	2009/04/01	23:36:33	50.8	50.0	50.6	50.2	49.3
28221	2009/04/01	23:36:48	49.1	47.6	48.5	47.2	47.4
28226	2009/04/01	23:37:03	48.0	49.5	51.4	57.2	66.8
28231	2009/04/01	23:37:18	75.7	58.6	56.2	50.9	51.7
28236	2009/04/01	23:37:33	55.7	62.8	69.4	74.5	54.1
28241	2009/04/01	23:37:48	51.6	49.2	52.4	51.9	52.3
28246	2009/04/01	23:38:03	51.8	54.9	64.1	73.2	56.5
28251	2009/04/01	23:38:18	53.8	50.7	45.6	48.0	47.7
28256	2009/04/01	23:38:33	51.1	53.2	56.7	76.3	66.0
28261	2009/04/01	23:38:48	56.1	53.3	49.8	51.3	52.6
28266	2009/04/01	23:39:03	51.0	50.0	51.0	52.2	58.3
28271	2009/04/01	23:39:18	58.4	71.4	62.3	55.3	55.6
28276	2009/04/01	23:39:33	49.0	51.1	50.2	51.5	52.4
28281	2009/04/01	23:39:48	58.3	73.2	54.6	51.4	49.4
28286	2009/04/01	23:40:03	50.1	48.8	47.4	47.9	42.7
28291	2009/04/01	23:40:18	49.4	50.8	52.2	59.1	68.8
28296	2009/04/01	23:40:33	65.8	74.1	77.7	71.9	72.7
28301	2009/04/01	23:40:48	58.0	62.9	84.7	67.7	57.8
28306	2009/04/01	23:41:03	52.3	50.6	54.6	50.3	53.8
28311	2009/04/01	23:41:18	58.1	69.4	57.2	56.2	52.8
28316	2009/04/01	23:41:33	48.1	44.7	45.9	49.1	53.0
28321	2009/04/01	23:41:48	57.7	73.5	76.3	75.2	70.2
28326	2009/04/01	23:42:03	59.0	55.8	53.7	52.4	52.2
28331	2009/04/01	23:42:18	52.2	55.8	59.9	77.7	70.8
28336	2009/04/01	23:42:33	59.1	52.8	52.5	52.5	52.2
28341	2009/04/01	23:42:48	50.4	51.7	49.9	51.3	49.7
28346	2009/04/01	23:43:03	51.8	50.5	49.5	51.7	52.3
28351	2009/04/01	23:43:18	53.0	60.7	74.3	62.9	55.7
28356	2009/04/01	23:43:33	55.7	51.0	55.8	59.2	70.3
28361	2009/04/01	23:43:48	64.2	54.9	54.8	59.4	76.5
28366	2009/04/01	23:44:03	68.8	54.7	53.4	50.1	50.0
28371	2009/04/01	23:44:18	49.6	49.4	50.8	50.2	48.8
28376	2009/04/01	23:44:33	53.2	51.4	53.8	66.6	66.3
28381	2009/04/01	23:44:48	54.6	52.6	54.5	59.0	72.5
28386	2009/04/01	23:45:03	68.4	59.4	54.4	55.5	52.2
28391	2009/04/01	23:45:18	52.1	58.6	79.1	66.8	58.8
28396	2009/04/01	23:45:33	62.5	65.0	76.0	61.2	57.8
28401	2009/04/01	23:45:48	55.6	55.0	71.0	64.7	54.7
28406	2009/04/01	23:46:03	58.0	71.8	54.4	53.8	50.8
28411	2009/04/01	23:46:18	48.8	49.8	49.2	49.2	55.5
28416	2009/04/01	23:46:33	62.6	78.3	71.3	58.3	57.5
28421	2009/04/01	23:46:48	51.8	49.4	49.5	50.4	51.0
28426	2009/04/01	23:47:03	52.1	54.9	59.6	67.3	57.2
28431	2009/04/01	23:47:18	56.8	56.5	65.2	69.3	80.0
28436	2009/04/01	23:47:33	61.2	56.4	55.2	54.9	57.1
28441	2009/04/01	23:47:48	55.2	68.5	70.0	55.5	53.0
28446	2009/04/01	23:48:03	46.4	51.1	53.0	53.9	51.0
28451	2009/04/01	23:48:18	53.5	53.0	54.4	50.5	55.4
28456	2009/04/01	23:48:33	55.0	57.6	60.2	73.0	74.1
28461	2009/04/01	23:48:48	72.6	71.3	89.2	73.5	65.5
28466	2009/04/01	23:49:03	74.8	71.6	61.8	57.9	72.1
28471	2009/04/01	23:49:18	68.3	58.5	60.8	55.2	53.7
28476	2009/04/01	23:49:33	52.5	55.4	59.6	61.7	71.4
28481	2009/04/01	23:49:48	56.5	54.9	55.2	52.2	56.2
28486	2009/04/01	23:50:03	75.9	61.8	62.2	75.2	58.5
28491	2009/04/01	23:50:18	50.7	55.3	55.8	56.2	56.3
28496	2009/04/01	23:50:33	59.7	72.9	69.6	65.8	61.0
28501	2009/04/01	23:50:48	60.1	64.3	75.9	64.1	72.6
28506	2009/04/01	23:51:03	75.8	76.2	64.4	60.8	61.2
28511	2009/04/01	23:51:18	71.3	69.1	57.0	59.1	61.2
28516	2009/04/01	23:51:33	68.7	79.1	61.4	61.1	61.8
28521	2009/04/01	23:51:48	68.5	82.8	71.5	61.9	58.8
28526	2009/04/01	23:52:03	58.8	59.0	60.4	62.6	73.8
28531	2009/04/01	23:52:18	64.7	60.4	58.9	60.5	58.7
28536	2009/04/01	23:52:33	57.1	58.2	60.0	60.9	60.2
28541	2009/04/01	23:52:48	63.8	71.9	64.0	60.2	64.0
28546	2009/04/01	23:53:03	63.2	64.2	63.3	63.6	64.8
28551	2009/04/01	23:53:18	64.1	63.6	61.5	72.4	62.7
28556	2009/04/01	23:53:33	55.8	64.6	63.5	64.5	64.2
28561	2009/04/01	23:53:48	63.1	61.6	63.6	66.0	66.6
28566	2009/04/01	23:54:03	72.3	71.8	65.8	66.5	65.6
28571	2009/04/01	23:54:18	65.0	66.9	66.2	67.0	68.1
28576	2009/04/01	23:54:33	68.0	67.1	77.5	71.7	68.4
28581	2009/04/01	23:54:48	67.5	65.0	62.7	66.5	65.1
28586	2009/04/01	23:55:03	65.7	65.3	62.3	63.4	64.8
28591	2009/04/01	23:55:18	74.1	77.6	70.6	60.5	66.4
28596	2009/04/01	23:55:33	67.9	68.5	66.9	57.6	63.4
28601	2009/04/01	23:55:48	64.1	66.6	64.4	66.2	65.7
28606	2009/04/01	23:56:03	53.7	55.6	67.0	67.8	70.0
28611	2009/04/01	23:56:18	71.1	66.9	75.4	68.5	67.2
28616	2009/04/01	23:56:33	69.0	69.4	73.0	74.5	74.0
28621	2009/04/01	23:56:48	77.3	71.2	66.8	69.0	73.1
28626	2009/04/01	23:57:03	66.5	66.7	58.2	56.5	51.1
28631	2009/04/01	23:57:18	60.8	57.1	64.4	73.3	56.8
28636	2009/04/01	23:57:33	54.3	46.9	45.3	46.6	44.0

28641	2009/04/01	23:57:48	42.5	46.2	44.1	47.2	44.2
28646	2009/04/01	23:58:03	44.8	44.1	47.7	52.0	57.2
28651	2009/04/01	23:58:18	66.6	80.0	65.0	56.7	49.9
28656	2009/04/01	23:58:33	50.1	51.6	55.4	64.8	75.6
28661	2009/04/01	23:58:48	66.4	76.8	63.6	64.2	75.4
28666	2009/04/01	23:59:03	75.0	62.9	61.1	59.1	66.3
28671	2009/04/01	23:59:18	75.7	56.6	57.9	53.8	54.3
28676	2009/04/01	23:59:33	55.7	43.6	53.2	48.1	50.6
28681	2009/04/01	23:59:48	52.6	55.9	62.9	71.5	67.4
28686	2009/04/02	00:00:03	66.9	56.0	51.4	53.7	62.2
28691	2009/04/02	00:00:18	73.6	77.1	58.7	58.2	54.3
28696	2009/04/02	00:00:33	48.0	52.9	54.6	62.6	70.0
28701	2009/04/02	00:00:48	67.2	54.8	56.5	52.0	51.8
28706	2009/04/02	00:01:03	51.0	51.2	50.1	49.4	54.0
28711	2009/04/02	00:01:18	52.3	54.2	55.0	55.4	50.8
28716	2009/04/02	00:01:33	52.6	55.2	54.1	58.5	73.5
28721	2009/04/02	00:01:48	73.6	66.9	57.2	63.7	82.0
28726	2009/04/02	00:02:03	81.1	62.8	53.6	54.0	54.2
28731	2009/04/02	00:02:18	57.3	70.0	57.4	60.9	71.8
28736	2009/04/02	00:02:33	53.2	50.8	43.6	43.4	45.1
28741	2009/04/02	00:02:48	43.7	46.1	46.2	47.4	49.8
28746	2009/04/02	00:03:03	53.4	54.1	57.6	59.6	68.7
28751	2009/04/02	00:03:18	60.1	75.6	65.2	52.2	52.3
28756	2009/04/02	00:03:33	61.4	73.3	77.7	65.2	59.2
28761	2009/04/02	00:03:48	53.5	47.1	44.7	51.6	53.0
28766	2009/04/02	00:04:03	57.9	75.3	71.2	53.8	52.3
28771	2009/04/02	00:04:18	52.7	59.3	73.0	77.1	72.5
28776	2009/04/02	00:04:33	75.9	60.9	58.6	52.5	53.4
28781	2009/04/02	00:04:48	59.2	74.0	63.9	70.0	71.0
28786	2009/04/02	00:05:03	56.6	57.4	49.2	45.0	44.4
28791	2009/04/02	00:05:18	39.5	43.1	53.0	60.4	73.2
28796	2009/04/02	00:05:33	65.6	72.7	60.7	68.9	62.4

Pipeline
Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 07/23/2019
Case Description: Pipeline

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Reference	Residential	60.0	50.0	40.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	50.0	0.0
Front End Loader	No	40		79.1	50.0	0.0
Dump Truck	No	40		76.5	50.0	0.0
Compactor (ground)	No	20		83.2	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Day Calculated (dBA) Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
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
Front End Loader	79.1	75.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	76.5	72.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	83.2	76.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	83.2	81.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residence	Residential	60.0	50.0	40.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)

			Pipeline		
Excavator	No	40	80.7	67.0	0.0
Front End Loader	No	40	79.1	67.0	0.0
Dump Truck	No	40	76.5	67.0	0.0
Compactor (ground)	No	20	83.2	67.0	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	Lmax	Leq	Lmax	Leq			
Excavator			78.2	74.2	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Front End Loader			76.6	72.6	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Dump Truck			73.9	69.9	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Compactor (ground)			80.7	73.7	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Total			80.7	78.9	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A			

RCNM - Pump Station
Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 07/23/2019
Case Description: Pump Station

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Reference	Residential	60.0	50.0	40.0

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
Excavator	No	40		80.7	50.0	0.0
Grader	No	40	85.0		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
Crane	N/A	N/A	80.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	N/A	N/A	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	N/A	N/A	85.0	81.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	N/A	N/A	85.0	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residence	Residential	60.0	50.0	40.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	110.0	0.0
Excavator	No	40		80.7	110.0	0.0
Grader	No	40	85.0		110.0	0.0

RCNM - Pump Station

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Calculated (dBA) Day Leq	Day Lmax	Evening Leq	Evening Lmax	Night Leq	Night Lmax	Day Leq	Day Lmax	Evening Leq	Evening Lmax	Night Leq	Night Lmax
Crane	73.7	65.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	73.9	69.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	78.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	78.2	76.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

FLOWSERVE

Pump Division

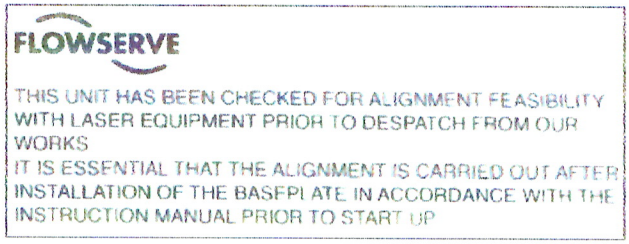
Type: LNGT

CENTRIFUGAL PUMP

USER INSTRUCTIONS:
INSTALLATION, OPERATION, MAINTENANCE

PCN=00083107 02-08 [E]

⚠ *These instructions must be read prior to installing, operating, using and maintaining this equipment.*



1.8 Specific machine performance

For performance parameters see section 1.5, *Duty conditions*. When the contract requirement specifies these to be incorporated into User Instructions these are included in the Supplementary User Instructions. Where performance data has been supplied separately to the purchaser these should be obtained and retained with these User Instructions if required.

1.9 Noise level

When pump noise level exceeds 85 dBA attention must be given to prevailing Health and Safety Legislation, to limit the exposure of plant operating personnel to the noise. The usual approach is to control exposure time to the noise or to enclose the machine to reduce emitted sound. You may have already specified a limiting noise level when the equipment was ordered, however if no noise requirements were defined then machines above a certain power level will exceed 85 dBA. In such situations consideration must be given to the fitting of an acoustic enclosure to meet local regulations.

Pump noise level is dependent on a number of factors - the type of motor fitted, the operating capacity, pipe work design and acoustic characteristics of the building.

Typical sound pressure levels measured in dB and A-weighted are shown in the table below the figures are indicative only, they are subject to a +3 dB tolerance, and cannot be guaranteed.

The values are based on the noisiest ungeared electric motors that are likely to be encountered. They represent sound pressure levels at 1 m [3.3 ft] from the directly driven pump, for "free field over a reflecting plane".

If a pump unit only has been purchased, for fitting with your own driver, then the "pump only" noise levels from the table should be combined with the level for the driver obtained from the supplier. If the motor is driven by an inverter, it may show an increase in noise level at some speeds. Consult a Noise Specialist for the combined calculation.

For units driven by equipment other than electric motors or units contained within enclosures, see the accompanying information sheets and manuals.

Typical sound pressure level, dBA, L_{pA} at 1 m reference 20 µPa [L_{WA} sound power 1 pW where L_{pA} 96 dBA]

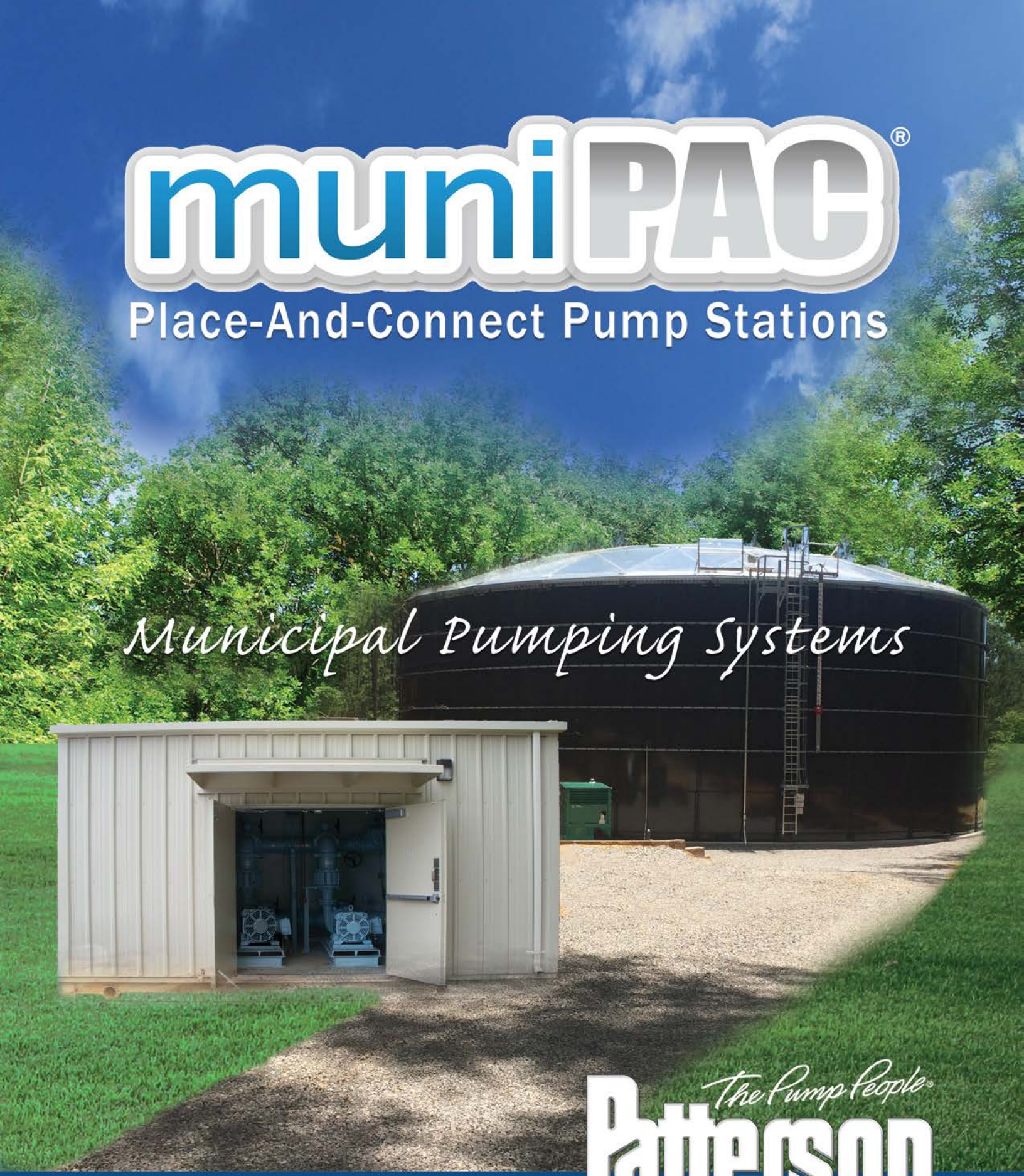
and speed kW [hp]	Pump and motor dB[A]	Pump only dB[A]	Pump and motor dB[A]	Pump only dB[A]	Pump and motor dB[A]	Pump only dB[A]	Pump and motor dB[A]	Pump only dB[A]
<0.55 [<0.75]	71 *[88]*	66 *[83]*	64 *[81]*	62 *[79]*	64 *[81]*	62 *[79]*	63 *[80]*	62 *[79]*
0.75 [1]	74 *[91]*	66 *[83]*	67 *[84]*	62 *[79]*	67 *[84]*	62 *[79]*	63 *[80]*	62 *[79]*
1.1 [1.5]	74 *[91]*	68 *[85]*	67 *[84]*	64 *[81]*	67 *[84]*	64 *[81]*	65 *[82]*	64 *[81]*
1.5 [2]	77 *[94]*	70 *[87]*	70 *[87]*	66 *[83]*	70 *[87]*	66 *[83]*	66 *[83]*	66 *[83]*
2.2 [3]	78 *[95]*	72 *[89]*	71 *[88]*	68 *[85]*	71 *[88]*	68 *[85]*	68 *[85]*	68 *[85]*
4 [5]	82 *[99]*	75 *[92]*	75 *[92]*	71 *[88]*	75 *[92]*	71 *[88]*	71 *[88]*	71 *[88]*
5.5 [7.5]	90 *[107]*	77 *[94]*	83 *[100]*	73 *[90]*	76 *[93]*	73 *[90]*	72 *[89]*	71 *[88]*
7.5 [10]	90 *[107]*	78 *[95]*	83 *[100]*	74 *[91]*	77 *[94]*	74 *[91]*	73 *[90]*	72 *[89]*
11 [15]	91 *[108]*	80 *[97]*	84 *[101]*	76 *[93]*	78 *[95]*	76 *[93]*	74 *[91]*	73 *[90]*
15 [20]	92 *[109]*	83 *[100]*	85 *[102]*	79 *[96]*	80 *[97]*	79 *[96]*	76 *[93]*	75 *[92]*
18.5 [25]	92 *[109]*	83 *[100]*	85 *[102]*	79 *[96]*	80 *[97]*	79 *[96]*	76 *[93]*	75 *[92]*
22 [30]	92 *[109]*	83 *[100]*	85 *[102]*	79 *[96]*	81 *[98]*	79 *[96]*	77 *[94]*	75 *[92]*
30 [40]	100 *[117]*	85 *[102]*	93 *[110]*	81 *[98]*	84 *[101]*	80 *[97]*	80 *[97]*	76 *[93]*
37 [50]	100 *[117]*	86 *[103]*	93 *[110]*	82 *[99]*	84 *[101]*	80 *[97]*	80 *[97]*	76 *[93]*
45 [60]	100 *[117]*	87 *[104]*	93 *[110]*	83 *[100]*	84 *[101]*	80 *[97]*	80 *[97]*	76 *[93]*
55 [75]	100 *[117]*	88 *[105]*	95 *[112]*	84 *[101]*	86 *[103]*	81 *[98]*	82 *[99]*	77 *[94]*
75 [100]	100 *[117]*	90 *[107]*	95 *[112]*	86 *[103]*	88 *[105]*	81 *[98]*	83 *[100]*	78 *[95]*
90 [120]	100 *[117]*	90 *[107]*	95 *[112]*	86 *[103]*	90 *[107]*	81 *[98]*	85 *[102]*	78 *[95]*
110 [150]	100 *[117]*	91 *[108]*	95 *[112]*	87 *[104]*	91 *[108]*	83 *[100]*	86 *[103]*	79 *[96]*
150 [200]	101 *[118]*	92 *[109]*	96 *[113]*	88 *[105]*	91 *[108]*	83 *[100]*	86 *[103]*	79 *[96]*
200 [270]	[1]	[1]	[1]	[1]	[1]	83 [100]	[1]	80 [97]
300 [400]	-	-	-	-	[1]	84 [101]	[1]	81 [98]
500 [670]	-	-	-	-	[1]	85 [102]	[1]	83 [100]
1000 [1300]	-	-	-	-	[1]	86 [103]	[1]	86 [103]
1500 [2000]	-	-	-	-	[1]	90 [107]	[1]	88 [105]

[1] Motors in this range are generally job specific and noise levels should be calculated based on actual equipment installed. For 960 r/min reduce 1450 r/min values by 5 dBA

muniPAC®

Place-And-Connect Pump Stations

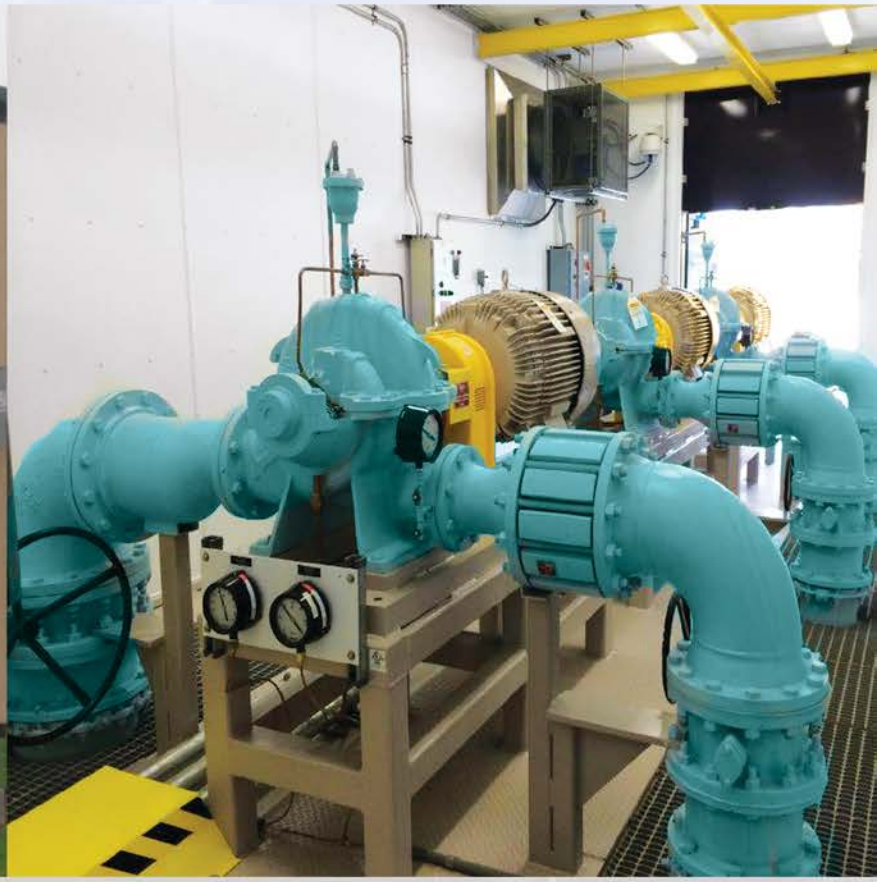
Municipal Pumping Systems



The Pump People®

Patterson

A Gorman-Rupp Company



When Quality Matters...

Patterson **Muni~Pac®** Place And Connect Pumping Stations...Setting the Bar for Packaged Systems Everywhere.

Engineered to provide municipalities a powerhouse of efficiency in water applications involving booster stations, raw water intakes and the filling of elevated tanks.

muniPAC

Place-And-Connect Pump Stations

Benefits of Packaged Systems

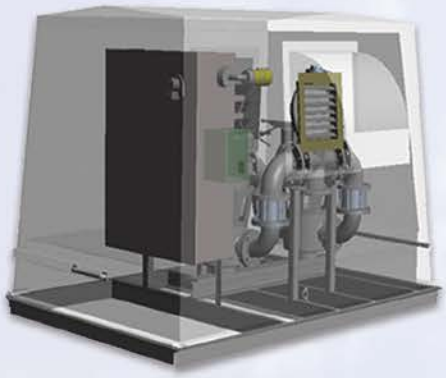
Patterson **Muni~Pac®** pre-packaged pump stations offer our customers peace of mind because they have a single point of contact for service and warranty claims.

Patterson **Muni~Pac®** stations can be furnished in various configurations including open skid or complete pumping station including a factory assembled building, to meet precise space requirements and can be supplied for above ground as well as below ground installations.

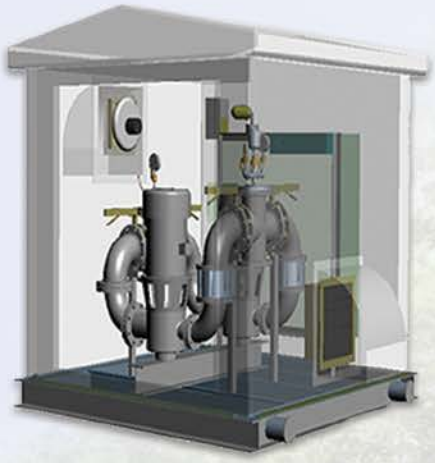
Patterson **Muni~Pac®** system designs accommodate flows from 100 GPM to over 19,000 GPM and pressures exceeding 300 PSI.

The Pump People®

MuniPac Standard Open



MuniPac Standard Housed Clamshell



MuniPac Standard Housed Stationary

Features

- Completely Pre-Configured
- CAD drawings available
- Duplex or Triplex Configuration
- Vertical In-Line Pumps
- Vertical Multi-stage Pumps
- End Suction Pumps (Future)
- Ductile Iron Piping
- Optional Fiberglass Enclosure

muniPAC

Place-And-Connect Pump Stations

Muni~Pac Standard

Place And Connect pumping systems are designed to reduce both initial cost and total cost of ownership.

Muni~Pac Standard Place And Connect pumping systems provide the following benefits:

- Reduced Cost Associated With Design
- Reduced Construction Time
- Dependable Schedules
- Factory Tested
- Reduced Start-Up Expense
- Single Point of Responsibility

The Muni~Pac Standard focuses on space-saving afforded us through the use of Patterson's Vertical In-Line style of pumps. The vertical in-line pump is a tried and true, space saving pump design that provides similar cost of ownership to that of end suction centrifugals and smaller horizontal split case pumps. The construction of close-coupled, vertical in-line pumps is almost identical to that of close-coupled, end suction style centrifugals. The entire rotating element can be removed without disturbing suction and discharge piping. Remote-coupled, vertical in-line pumps afford maintenance personnel the additional freedom to replace mechanical seals without having to first remove the electric motor.
The Muni~Pac Standard is a complete booster pump solution that comes completely pre-wired and pre-plumbed from the factory.

muniPAC® Standard

With their single point power connection and simplified influent and effluent connections, installation of Muni~Pac Standard Place And Connect pumping systems is a snap.
The Muni~Pac Standard includes:

- Patterson Vertical In-Line Pumps or vertical Multi-stage Pumps (Duplex or Triplex)
- Ductile Iron Suction and Discharge Manifolds
- PLC or SCADA Control
- Variable or Constant Speed Motor Controllers
- Isolation Valves For Each Pump
- Check Valve For Each Pump
- System Suction and Discharge Pressure Gages
- Structural Steel Skid With Lifting Lugs or Optional Forklift Slots
- Optional Flow Meter
- Optional Pressure/Surge Relief Valve
- Optional Clamshell Enclosure For Smaller Systems
- Optional Stationary Enclosure For Larger Systems

The Pump People®

Above Grade Fiberglass Enclosures...

Optional Clamshell Enclosure

- Gas shocks for lift assist.
- Exhaust fan & return damper
- 500 Watt heater
- Stainless steel hardware
- R-19 Insulation Value
- 5 dB Noise reduction
- Available In various colors

Optional Stationary Enclosure

- Removable Roof
- Exhaust fan & return damper
- 500 Watt heater
- Stainless steel hardware
- R-19 Insulation Value
- 5 dB Noise reduction
- 125 MPH Wind Load
- 40 PSF Snow Load
- Doors available on all sides
- Available In various colors

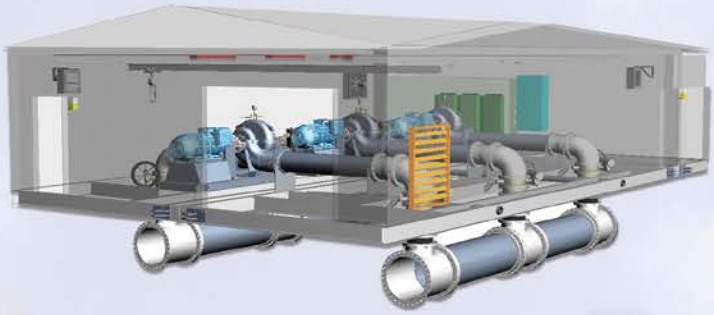
muniPAC

Place-And-Connect Pump Stations

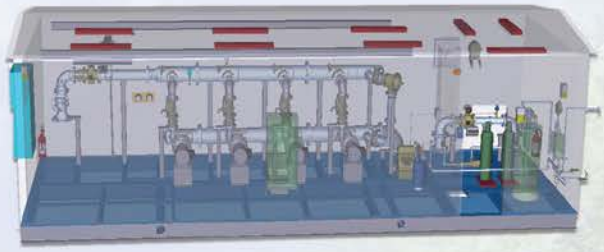
Stationary Fiberglass Enclosures...

muniPAC® Standard

The Pump People®



MuniPac Plus Option A



MuniPac Plus Option B

Features

- Completely preassembled to the greatest extent possible.
- Pre-wired
- Pre-Plumbed
- Multiple Pump Types
- Optional Building Enclosures
- Optional Standby Power Systems
- Optional Chemical Feed Systems
- Designs Up To 19 MGD

muniPAC

Place-And-Connect Pump Stations

Muni~Pac Plus

Place And Connect pumping systems are designed to reduce both initial cost and total cost of ownership.

Muni~Pac Plus Place And Connect pumping systems provide the following benefits:

- Factory Assembled
- Design Flexibility
- Factory Testing Options
- Custom PLC Programming
- Multiple Piping Material Options
- Multiple Architectural Finish Options
- Reduced Project Completion Time
- Factory Direct Design Assistance
- Multiple Rooms
- Multiple Roof Style Options

The Muni~Pac Plus focuses on the specific equipment needs of our customers. Input from our customer's concerning pump and valve types, control needs and architectural considerations are used to develop solutions to satisfy each customer's unique demands.

The Muni~Pac Plus is a complete booster pump solution that comes completely pre-wired and pre-plumbed from the factory. With their single point power connection and simplified influent and effluent connections, installation of Muni~Pac Plus, Place And Connect pumping systems is a snap.

The Muni~Pac Plus Typically Features:

- Multiple pump options including vertical in-line, end suction, horizontal split case and vertical turbine pumps
- Suction and discharge manifold piping from a variety of materials including ductile Iron, carbon steel and stainless.
- PLC or SCADA Control
- Custom PLC Programming
- Variable or Constant Speed Motor Controllers
- Isolation Valves For Each Pump
- Check Valve For Each Pump
- System Suction and Discharge Pressure Gages
- Multiple Power Distribution Options That Include Motor Control Centers and Panelboards.
- Multiple Skid and Floor Options That Include Structural Steel and Pre-Cast Concrete.
- Multiple flow meter options including turbine and magnetic from various manufacturers.
- Multiple control valve options including Pressure/Surge Relief Valves, solenoid operated valves, pressure reducing valves and pump control valves.
- Optional modular steel enclosure with multiple architectural finishes and options.

The Pump People®

Above Grade Steel Enclosures...

Options for Exterior Finish

26 Gauge Steel

- Kynar 500 Baked On Finish
- 30 Year Warranty Against Fading
- 40 Year Warranty Against Rust
- Optional Rain Canopy
- Optional Gutters & Down Spouts

Dryvit Stucco

- Optional Rain Canopy
- Optional Gutters & Down Spouts
- Wide Choice of Color

Thin Set Brick

- Choice of Brick Finish & Color
- Optional Rain Canopy
- Optional Gutters & Down Spouts

Fullerton Castwall

- 8 X 8 Split Face Block Appearance
- Optional Rain Canopy
- Optional Gutters & Down Spouts
- Choose From 12 Colors

muniPAC

Place-And-Connect Pump Stations

Muni~Pac Plus Above Grade Steel Enclosures...

muniPAC® PLUS

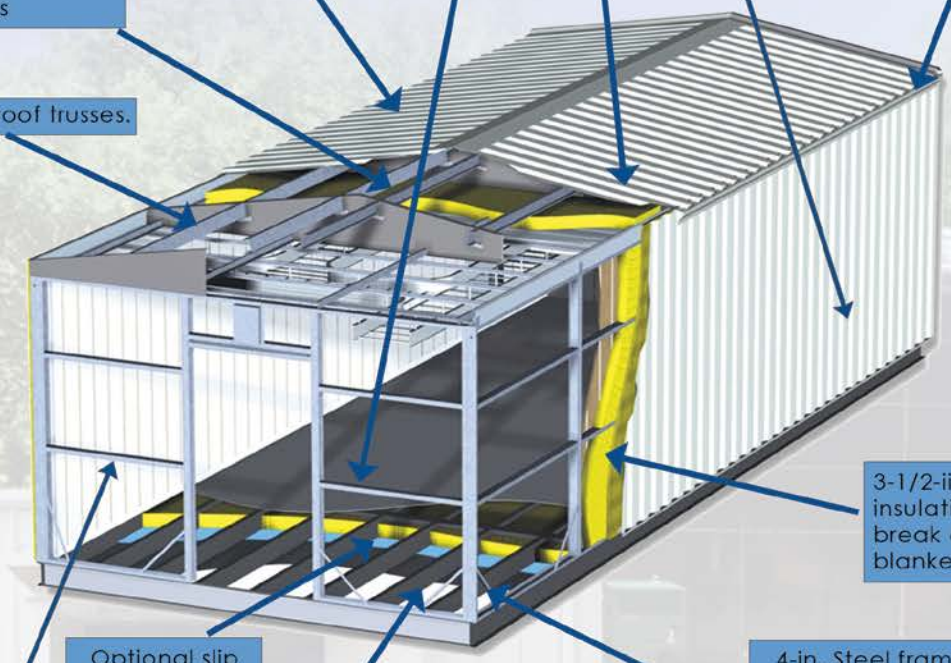
Available roof styles include gabled, hipped, and single slope. Roofing materials can be 18, 24, or 26-gauge ribbed steel or plywood with architectural shingles.

Kynar 500 – baked on polyester resin finish on roof, ceiling, exterior and interior wall panels – guaranteed against fading or chalking for 30 years.

Optional gutters and down spouts.

Galvanized steel roof purlins

Solid web roof trusses.



3-1/2-iin. – R14 high density insulation with 1-in. thermal break consisting of 1-in. blanket insulation.

Optional slip resistant steel deck plate.

4-in. Steel framework consisting of 12, 14 & 16 gauge galvanized steel. Building load requirements are met prior to the installation of the roof and exterior panels.

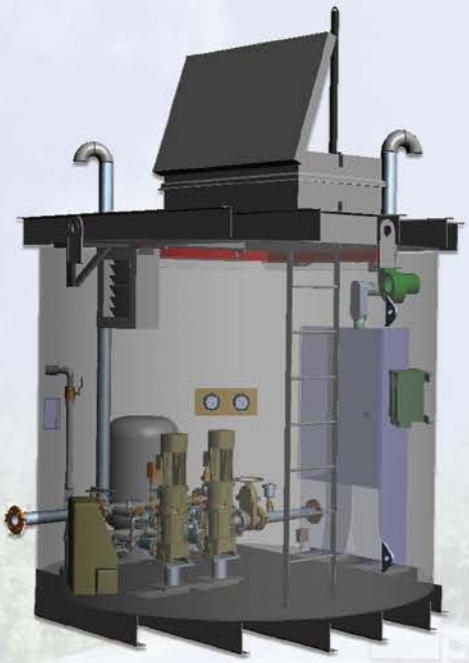
22-gauge steel liner panel with concealed fasteners or FRP laminated, 7/16-in. OSB plywood.

Optional open skid design to allow concrete fill by installing contractor.

Optional bridge crane for equipment removal.

The Pump People®

Below Ground Vaults



Features

- Stainless Steel & Aluminum Entry Hatches
- Built In Entry Ladder or Ship Stairs
- Carbon or Stainless Steel Construction
- H20 Loading Capability
- Structural Calculations Provided
- Engineered Ventilation System Provided
- Designs Up To 20 MGD
- Anode Protection Included
- Circular or Oblong

muniPAC

Place-And-Connect Pump Stations

Muni~Pac BG

Patterson Pump Company's Muni~Pac BG, below grade pumping systems are designed to reduce both initial cost and total cost of ownership.

Muni~Pac BG Place And Connect pumping systems provide the following benefits:

- Hidden From Sight
- Reduced Cost Associated With Design
- Reduced Construction Time
- Dependable Schedules
- Factory Tested
- Reduced Start-Up Expense
- Single Point of Responsibility

Application:

- Booster Stations
- High Service Pump Stations
- Raw Water Pump Stations
- Effluent Pump Stations
- Reuse Booster Pump Stations
- Lift Stations (Not Submersible)
- Storm Water Pump Stations (Not Submersible)
- Pressure Reducing Stations
- Flow Meter Vaults

The **Muni~Pac BG** focuses on the ever present rea estate concerns of our customers. Hidden from site, security concerns are minimized along with your real estate needs.

muniPAC® BG

The **Muni~Pac BG** is a complete booster pump solution that comes completely pre-wired and pre-plumbed from the factory. The Muni~Pac Standard includes:

- Carbon steel or optional 304 stainless steel equipment capsule.
- Engineered heating and ventilation system.
- Sump Pump
- Pump options that include vertical in-line, vertical multi-stage and horizontal split case pumps.
- Carbon steel or optional stainless steel suction and discharge manifold piping.
- PLC or SCADA Control
- Variable or Constant Speed Motor Controllers
- Isolation Valves For Each Pump
- Check Valve For Each Pump
- System Suction and Discharge Pressure Gages
- Multiple flow meter options including turbine and magnetic from various manufacturers.
- Multiple control valve options including Pressure/Surge Relief Valves, solenoid operated valves, pressure reducing valves and pump control valves.
- Corrosion resistant entry and equipment removal hatches.

The Pump People®

Below Ground Vaults...

Below Ground HSC

Entry Hutch and
Ventilation Tube

Below Ground Vaults

Optional Stainless Steel
Construction

muniPAC

Place-And-Connect Pump Stations

Below Ground Vaults...

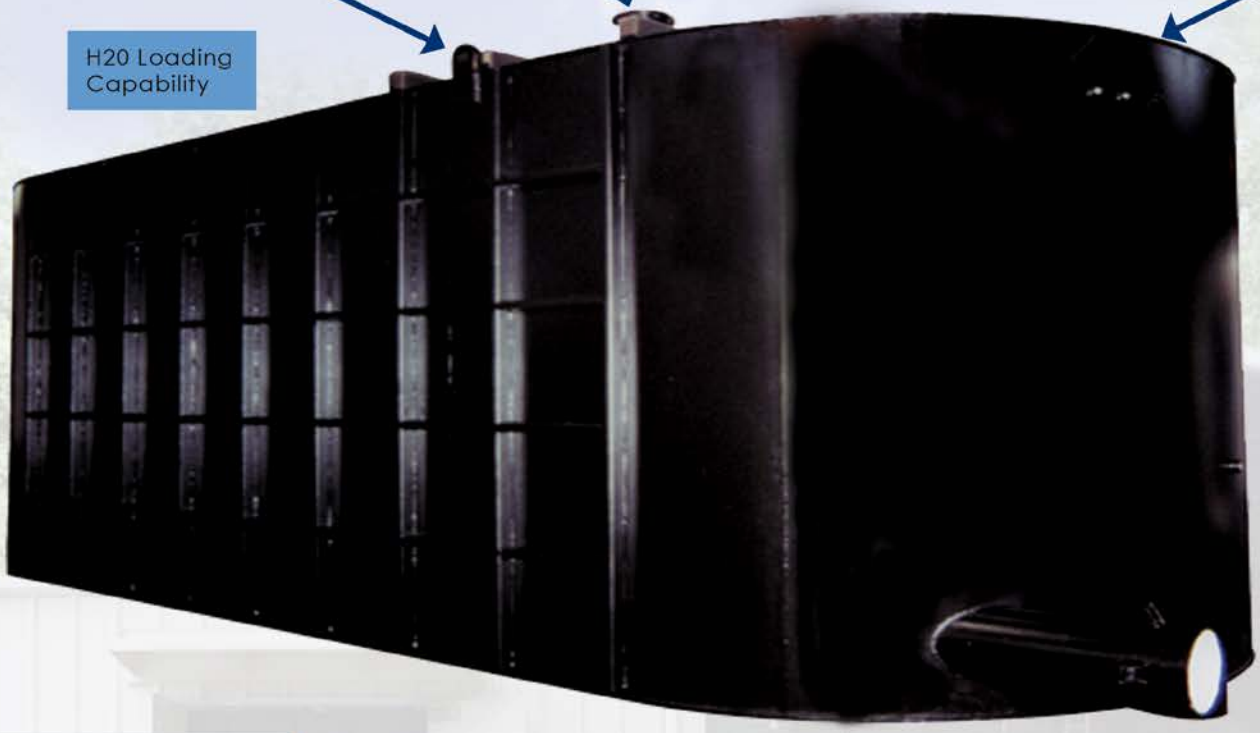
muniPAC® BG

Stainless Steel & Aluminum Entry Hatches

Engineered Ventilation System Provided

Carbon or Stainless Steel Construction

H20 Loading Capability



Circular or Oblong

Built In Entry Ladder or Ship Stairs

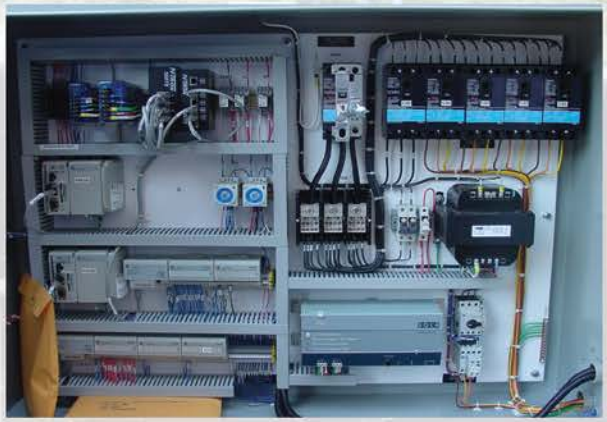
The Pump People®

Controls ...

Features:

- UL 508A & ETL Listed
- Variable or Constant Speed
- Optional Motor Control Center Construction
- Optional Flow Switch or Flow Meter Input
- Optional Suction Pressure Transmitter Input
- Optional Serial Communication Capability
- Built-in Ethernet Communication
- Optional Dry Contacts For Scada
- Flow (Optional), Total Discharge Pressure, Suction Pressure (Optional), Elapsed Time, number of starts, kW, and amps Displayed on Operator Interface.
- Custom PLC Programming
- Easily Web Enabled With Secure Firewall
- Pressure or level control
- Standard 6" Color Touch Screen Operator Interface (10" Optional)
- Enhanced diagnostic capability
- Alarm conditions and trouble shooting instructions appear on operator interface, thus eliminating the need for pilot lights
- Optional Cellular Remote Monitoring

Motor Control Center Construction



6" Color Touch Screen

muniPAC

Place-And-Connect Pump Stations

Patterson INTUITION

Schneider Electric

Intelligent Variable Speed Pump Control...

Intuition is the most advanced Variable Frequency Drive for pumping applications on the market today. Developed jointly by Schneider Electric and Patterson Pump Company, Intuition features:

- Intuitive Variable Speed Pump Control
- Multi-Pump Control For Up To 6 Pumps
- Onboard Web Server
- QR Code Generation
- Screen Snap Shot Feature

Operational Intelligence

Applications need to run at optimum efficiency for your success. Making informed decisions, easily, at a moment's notice is foundational to this. Embedded process knowlege provided by Patterson Intuition gives you the information you need.

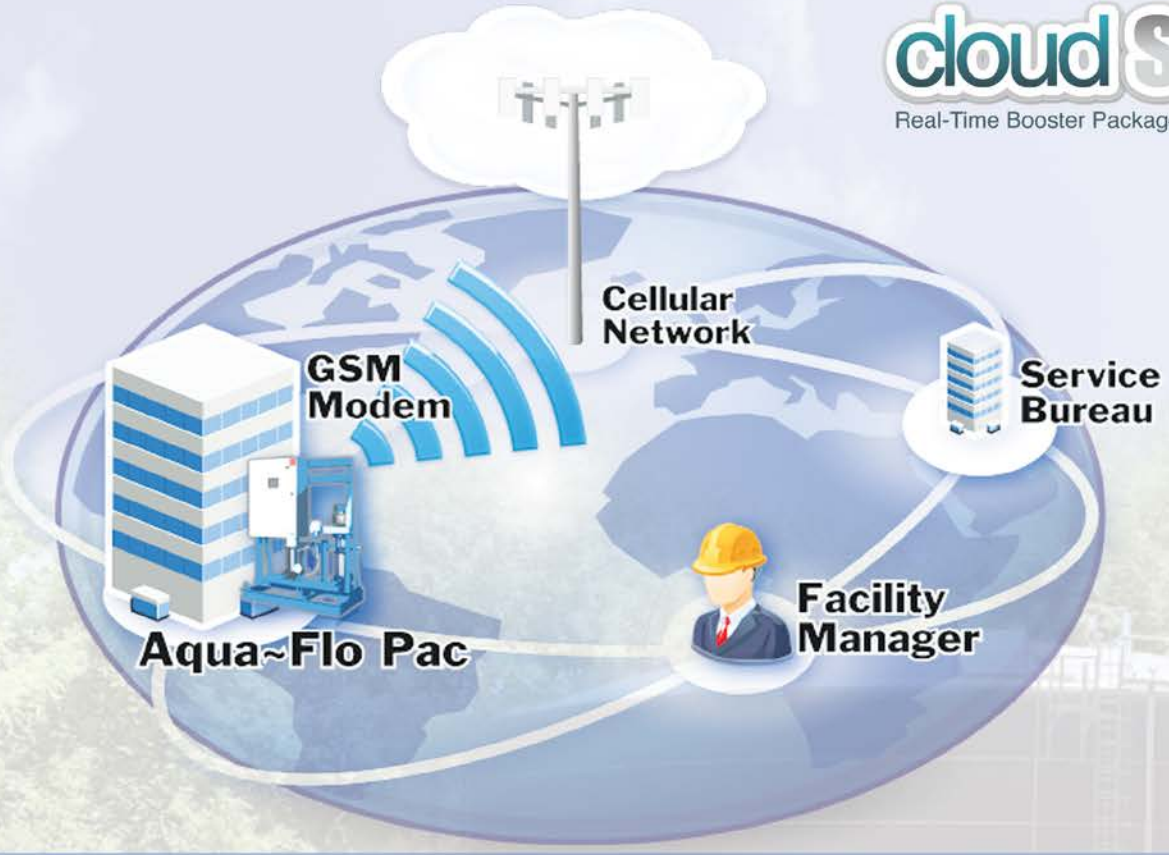
Embedded Guidance

Avoid getting lost with start-up, integration of your drives and maintenance needs. New and intuitive built-in functions simplify support and diagnostics, allowing issues to be solved quickly and comprehensively.

The Pump People®

cloudSTAT®

Real-Time Booster Package Monitoring



CloudStat allows compiling of important data for up to three years, aiding preventative maintenance. Alarms are communicated instantly by email or SMS text.

With CloudStat® monitoring, supervisors can remotely monitor the outstanding efficiency and status of VIL series pumps is an easy and ready to use solution that allows you to:

- Manage equipment in locations worldwide
- Monitor and analyse machine and installation data remotely
- Troubleshoot & Modify programming remotely

muniPAC

Pumping Technology for Tomorrow's World

Over the last century, Patterson built a firm reputation for reliable pump installation worldwide

Patterson Pump Company leads America as one of the foremost designers and manufacturers of: Split Case Pumps; Fire Pumps; Axial and Mixed Flow Pumps; Vertical Turbine Pumps; End Suction Pumps; Vertical In-Line Pumps; solids handling pumps; engineered packaged systems; HVAC and Booster Systems.

Proven Quality and Reliability for More Than a Century. It is Patterson's century-long dedication to the quality, innovation and reliability of its products that has inspired its high-quality, valued employees.
Patterson's design engineers are driven to continuously make incremental improvements throughout the company's product line and to develop leading-edge pumping technology.

Just as Patterson's highly trained machinists meticulously operate the cutting-edge, computer-controlled machining centers, vertical turning centers and computerized lathes—all to create Patterson products with high-precision workmanship in less time for faster delivery.

The quality and reliability of Patterson products doesn't stop at installation. Patterson is equally dedicated to providing the finest field and factory services and maintaining the best service department in the industry.

ISO 14001 Certification. Patterson does more than strive for quality and reliability; Patterson has invested in the company's core values.

Attesting to its world-class quality and dependability. The company is continually reevaluated, with a complete reassessment every three years, to ensure all elements are maintained in keeping its products world-class.

Six Sigma. Patterson has also invested significant resources into its Six Sigma program. Six Sigma is an optimized level of performance. That's overall excellence—not only in a world-class finished product, but also in the administrative, service and manufacturing processes throughout the company.

Patterson's Six Sigma program is a proven methodology that standardizes the right tools and techniques, while providing working teams with step-wise progressions in applying these tools. The program has successfully enhanced Patterson's reputation for high-quality, reliable pump design, manufacture and service.

The Pump People®

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Noise Control Enclosures

Tackling noise at its source(s) with noise control enclosure packages will effectively contain and reduce plant wide levels. A highly effective means for controlling localized industrial noise is the installation of an encapsulating noise control enclosure around a source such as a hammer mill or compressor, to contain and absorb the noise to an acceptable level and at the same time, not interfering with the process equipment access or production schedule. Because almost every in-place noise issue is in a different plant environment or from a specific piece of machinery, each application requires a custom design for the enclosure and with an understanding of the surrounding noise sources and building structure.

Quick Links

Noise Control Curtain Systems

Noise Enclosures

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Noise Enclosure Panels

There are two (2) basic categories of enclosures based on construction. Both are used in sound enclosure applications such as:

- Containment of machinery
- Process enclosures
- Facility dividers
- Movable screens
- Engine housing
- Compressor/pump/fan enclosures
- Factory quiet areas
- Control rooms

Noise Control Curtain Systems

Privacy - Terms

Attaching flexible curtains to a tubular frame assembly provides an efficient noise control system. The soundproofing curtain systems are an economical, high performance, noise control product possessing high mechanical strength. They are fire safe, easily cleanable, resistant to dust, dirt, oils and most chemicals, and give a long service life. Curtains reduce reverberant noise energy and offer a 7-10 dB reduction. Curtain enclosures sometimes referred to as “softwall” noise enclosures, are available which combine a high-mass noise control barrier with a lightweight acoustical fiberglass absorber, are designed to both contain and absorb noise, and offer an average of 12-15 dB reduction.

Options include:

- Grommets and/or Velcro on edges
- Steel framing (self-supported or ceiling mounted)
- High-temperature and outdoor facings
- Decorative facings
- Standard or custom colors
- Clear view windows
- Roof systems
- Access panels and doors
- Vent kits
- Tracked panels for quick movement

Benefits of a noise control curtain enclosure include:

- Quick access
- Replacing a damaged panel is quick and easy
- Movable
- Durability – with chemical and oil resistance
- Cost-effectiveness – compared with metal enclosures
- Easy assembly – no special installation required
- Flexibility – movable and reusable
- Fire safety – with low smoke configurations

Noise Enclosures

Privacy - Terms

Another effective means to attenuate a noise source is a rigid metal enclosure. Our standard wall panel is constructed of an 18 GA solid exterior skin with a 22 GA interior perforated liner, and a 4 lb/cu. ft. density acoustic fill core. Options for other types of wall construction are available. With a Standard Tempering Core (STC) of up to 41, metal enclosures are designed to both contain and absorb noise, and to act as a barrier between noisy and quiet areas. Attenuation expected is 20 to 25 dBA. Options include:

- Clear view windows used to view machinery in operation
- Roof systems
- Ventilation systems for heat removal
- Louvers and ventilators
- Access panels
- Single or double seal doors
- Custom cut-outs to accommodate existing gauges, hoses, valves, and conduit
- Outdoor and high-temp models available

Noise Enclosure Panels for Air Handling Units

Noise control for air handling units can be applied to reduce the sound levels from the air handler fan. The air handler's sides and top would have double wall construction with internal fiberglass insulation. The noise enclosure panel thickness would be based on attenuation requirements. Along with the walls, the inlet and outlet duct from the air handler would be evaluated and treated as required.

SysTech offers both standard and custom designed **sound enclosure** systems and can help you to determine the best sound enclosure option to suit your needs.

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About SysTech Design Inc.

SysTech Design Inc. is regionally located with offices in the cities of Downingtown, Exton, Baltimore, Lancaster, Piscataway, and Pittsburgh. We support clients throughout the United States, while serving an immediate area that covers:

- Pennsylvania
- Delaware
- Maryland
- New Jersey
- New York
- Virginia

Get In Touch

Phone: **800-456-9460**

Click Here To Email Us

SysTech Design Inc.
300 North Pottstown Pike
Exton, PA 19341

Testimonials

Latest Case Study

Don’t Blame the Dust Collector

March 18, 2019

“How Process Changes Affect Your Dust Collection System” PROBLEM: SysTech received a call about premature filter failure in a...

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Groundborne Noise and Vibration Modeling

Notes
The receiver distance is measured from the nearest anticipated point of construction equipment to the nearest structure.

	Reference Level Inputs			
Equipment	**PPV_{ref} (in/sec)**	**Lv_{ref} (VdB)**	**RMS_{ref} (in/sec)**	**Reference Distance**
Vibratory Roller	0.21	94	0.050	25
Large bulldozer	0.089	87	0.022	25
Loaded trucks	0.076	83	0.014	25
Jack hammer	0.035	79	0.009	25
Small bulldozer	0.003	58	0.001	25

	Vibration Level at Receiver			
Equipment	**Distance (feet)**	**PPV_x (in/sec)**	**Lv_x (VdB)**	**RMS_x (in/sec)**
Vibratory Roller	35	0.1450	91	0.035
Large bulldozer	35	0.0615	84	0.015
Loaded trucks	35	0.0525	80	0.010
Jack hammer	35	0.0242	76	0.006
Small bulldozer	35	0.0021	55	0.001

Source
California Department of Transportation (Caltrans). 2013. Transportation and Construction Last Updated: 4/11/2019

Appendix F

Federal Clean Air Act Conformity Analysis

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November 18, 2022
Project No: 19-07446

Julia Aranda, PE, Engineering Manager
Casitas Municipal Water District
1055 Ventura Avenue
Oak View, California 93022
Via email: jaranda@casitaswater.com

Subject: Ventura-Santa Barbara Counties Intertie Project
Federal Clean Air Act General Conformity Analysis

Dear Ms. Aranda:

This memorandum has been prepared for the Casitas Municipal Water District (Casitas) and serves as the General Conformity Analysis for the Ventura-Santa Barbara Counties Intertie Project (herein referred to as "project" or "proposed project"). Casitas plans to fund the project through federal funding sources. Projects funded through federal funding sources are required to comply with certain federal environmental protection laws, including the federal Clean Air Act (FCAA). A federal agency determines that its action would not conflict with air quality attainment plans through a processed referred to as "general conformity." Therefore, the purpose of this memorandum is to evaluate the proposed project's conformity to the applicable State Implementation Plan (SIP) and consistency with the FCAA General Conformity Rule.

Project Description

This air quality conformity analysis addresses the proposed project, which is located in the South Central Coast Air Basin (SCCAB) and falls under the jurisdictions of the Ventura County Air Pollution Control District (VCAPCD) and the Santa Barbara County Air Pollution Control District (SBCAPCD). The proposed project involves the construction and operation of potable water infrastructure to connect the Casitas and Carpinteria Valley Water District (CVWD) water transmission systems. The proposed project includes approximately 7,100 linear feet (LF; 1.3 miles) of new 16-inch-diameter potable water pipeline, two new booster pump stations, replacement of select portions of the existing Rincon Main, and improvements to infrastructure at other existing Casitas facilities. The pipeline would traverse the boundary between Ventura and Santa Barbara counties and act as a two-way intertie to allow the transfer of water between Casitas and CVWD, as necessary.

For the purposes of quantifying criteria pollutant emissions, this analysis models the recommended engineering design for project implementation. The project's recommended design is described below.

Pipeline

The proposed project would include approximately 7,100 of 16-inch-diameter, underground potable water pipeline. Proposed pipeline construction would primarily entail conventional, open-trench

excavation within existing roadways. Open-trench excavation is a construction method typically utilized to install pipelines and their appurtenant structures, which include blow-offs, service meters, valves, and vaults. In general, the process of pipeline construction in a roadway would consist of site preparation, excavation and shoring, pipe installation and backfilling, and street restoration (where applicable). Pipeline construction using open-trench method requires the use of an excavator, wheeled loader, dump truck, and vibrating compactor.

The project also includes the replacement of four portions of the existing Rincon Main Pipeline with insufficient capacity, referred to as Replacements 1a, 1b, 1c, and 2a. Replacements 1a, 1b, and 1c are located directly east of the future BPS-A site, within the existing orchard. Replacements 1a, 1b, and 1c would include the replacement of approximately 10 LF, 200 LF, and 100 LF of the Rincon Main Pipeline, respectively. Replacement 2a is located directly east of BPS-B and would include the replacement of approximately 210 LF of the Rincon Main Pipeline.

The following is a description of the phases of construction for open-cut trenching:

- **Site Preparation.** The existing pavement along the pipeline alignment is cut with a concrete saw or otherwise broken and removed using jackhammers, pavement breakers, and loaders. Other similar equipment may be used. The pavement is removed from the project site and recycled or disposed of at an appropriate facility.
- **Excavation and Shoring.** A trench is excavated along the alignment using backhoes, excavators, or other types of excavation equipment. Portions of the trench adjacent to existing utilities may be manually excavated. Approximately 2,900 cubic yards of soil and pavement would be hauled away and disposed of at an appropriate facility. The remainder of the excavated soil would be temporarily stored adjacent to the trenches or stored at staging areas to be used as trench backfill.

  The pipeline requires a minimum 30-inch width at its deepest location to a five-foot-wide trench at the surface in which to work and place the pipe. Trenches would generally be no more than six feet deep, unless there is a need to cross another utility or a trenchless-construction crossing requires a deeper, rectangular boring pit. If crossing another utility is required, the proposed trench depth depends on the depth of the existing utility and required clearance (generally, at least one foot) between the proposed pipeline and the existing utility line. Maximum trench depth would be approximately 10 feet in these areas.
- **Pipe Installation and Backfilling.** Once the trench is excavated and shored (if necessary), the pipe and backfill material are placed in the trench. Backfill would include approximately 781 cubic feet of sand and 1,562 cubic feet of soil.
- **Street Restoration.** Final paving is performed once the entire pipeline segment is installed. Paving progresses at the rate of approximately 1,000 square feet per day. Paving requires a wheeled loader, paving machine, and roller. Once the pavement is restored, traffic delineation (striping) is also restored.

Typical open-cut pipeline construction, including trenching, installing the pipe, backfilling, and temporary plating, is accomplished at approximately 200 to 300 LF per day during favorable weather conditions typically observed from April to October. The crossing of Rincon Creek would occur using the trenchless HDD method. Trenchless HDD construction involves excavating an entrance pit on one side of the creek and a receiving pit on the opposite side of the creek. A pilot hole is drilled along the pipeline alignment, followed by the enlarging of the hole by passing a larger cutting tool (back reamer) through the hole. The pipe is then placed in the hole beneath the creek using a drill stem; the back reamer pulls

the pipe into place behind it. Approximately 500 CY of spoils will be removed during HDD construction, based off a 30-inch borehole. Upon completion of pipe installation, the entrance pit and receiving pit are backfilled and the disturbed land or habitat is restored.

Materials required for pipeline construction include pipe, fittings and appurtenances, sand, cement slurry, and natural earth material for backfill, and paving materials. The staging areas for pipeline construction would be at existing, previously disturbed areas near the proposed alignment or along the pipeline alignment within paved roadways. It is estimated for each 1,000 LF of pipeline construction, five material deliveries per day would occur.

Booster Pump Stations

The proposed project also involves the construction and operation of two booster pump stations: BPS-A and BPS-B. BPS-A would consist of an approximately 2,000-square foot concrete masonry unit (CMU) block wall building. BPS-B would consist of an approximately 900-sf CMU block wall building housing three vertical turbine pumps (two duty and one standby pump) within a mechanical room. Each booster pump station would include an outdoor transformer and Meter/Main Switchboard. Construction of the booster pump stations would include: site grading; underground and aboveground piping; concrete pads for pumps, piping, and electrical equipment; electrical service from Southern California Edison; installation of pumps, motors, and electrical equipment; minor site improvements such as fencing and awnings over equipment; and start-up and testing. Typical construction equipment would include an excavator, grader, crane, and standard work trucks. Construction supplies and equipment would be staged at each pump station site.

Improvements to Existing Casitas Infrastructure

The proposed project would require miscellaneous infrastructure improvements at a number of existing Casitas facilities: the Rincon Main Pipeline, Rincon Control Reservoir, Rincon Vents, Chlorination Station, and Rincon Pump Plant.

Rincon Main Pipeline

The proposed project would implement minor surge protection improvements at several existing air-relief valve locations along the existing Rincon Main Pipeline.

Rincon Control Reservoir

The Rincon Control Reservoir is an existing 250,000-gallon welded steel tank facility located between the proposed BPS-A and BPS-B along the Rincon Main Pipeline. Currently, the facility accommodates water flows from the Casitas system towards the CVWD system. The proposed project would modify the existing facility to allow for water flow in the reverse direction. Improvements would include new bypass piping and valve configuration, as well as electrical and communication system modifications.

Chlorination Station

The existing Chlorination Station is currently out of operation. The facility is located adjacent to an 18-inch shepherds hook vent. The project would replace the existing vent at the Chlorination Station site with a new equivalent combination air release valve to accommodate the proposed project. The project would not result in operation of the Chlorination Station.

Rincon Vents

The Rincon Vents are existing vent structures for the Rincon Main Pipeline, located along the southern side of SR 150, approximately 4,940 feet west of Lake Casitas. To accommodate the proposed project, minor electrical and mechanical improvements would be conducted. Two options for mechanical improvements are under consideration: (1) either the existing vent structures would be replaced with combination air release valves or taller standpipe vents, or (2) a new level indicating transmitter would be added to the existing vent structure stilling well and the northern vent would be raised by 10 feet.

Rincon Pump Plant

The Rincon Pump Plant is an existing pump facility located southeast of Lake Casitas and east of the Lake Casitas Dam. The proposed project would include installation of a new pressure sustaining and reducing valve, a check valve, isolation valves, and approximately 130 LF of 18-inch bypass pipeline at the Rincon Pump Plant.

Construction Schedule

Project construction would likely be phased and implemented over approximately 21 months, between Summer 2023 and Spring 2025.

Project construction activities would generally occur during normal Casitas working hours, from 7:00 a.m. to 4:00 p.m. Monday through Friday, excluding holidays observed by Casitas. Trenchless HDD construction work hours will take place from 7 a.m. to 7 p.m., with exception of a 48-hour period of continuous work to complete the HDD pull through operation. Casitas intends to conduct construction activities during the day; however, if an emergency situation(s) requires construction beyond 3:00 p.m., nighttime construction may be required. Approximately 10 two-way worker trips would occur per workday. Pipeline construction would progress at the rate of approximately 200 to 300 LF of pipeline per day.

Operation and Maintenance

BPS-A would be equipped with three 500 horsepower (HP) pumps, two operational pumps and one pump on standby, as well as one 15-HP jockey pump. BPS-B would be equipped with three 150-HP pumps, two operational pumps and one pump on standby. BPS-A and BPS-B pumps would operate as needed. Maintenance activities would occur monthly and on an as-needed basis, and approximately 50 vehicle trips by maintenance staff per year would occur. Regular and routine maintenance activities would not include any ground-disturbing activities.

Regulatory Framework

Section 176(c) of the FCAA, as amended (42 United States Code [U.S.C.] 7401 et seq.) prohibits agencies of the Federal Government from engaging in, supporting, providing financial assistance to, or issuing permits for activities, which do not conform to an applicable SIP. Requirements for preparation of SIPs, provided in 40 Code of Federal Regulations (CFR) 51, were adopted by VCAPCD in Rule 220 and by SBCAPCD in Rule 702.

Title 40 CFR Part 51 Subpart W and 40 CFR Part 93 Subpart B: General Conformity

The General Conformity Rule requires federal agencies to ensure that actions taken by those agencies conform to the applicable SIP. General Conformity regulations apply only to direct and/or indirect emissions caused by the actions that occur in areas designated as nonattainment or maintenance areas with respect to National Ambient Air Quality Standards (NAAQS). These regulations require an applicability analysis to determine whether the federal action must be supported by a conformity determination. The applicability analysis is established for federal actions performed in locations with a history of non-compliance, as described below:

a. An area that is in nonattainment (i.e., has recorded violations of the NAAQS) for a criteria pollutant (such as ozone, carbon monoxide, and particulate matter)
b. An area designated as a nonattainment area but was later re-designated by the Administrator of the Environmental Protection Agency (USEPA) as an attainment area, and that is required to develop a maintenance plan under Section 7505a of 42 U.S.C. with respect to the specific pollutant for which the area was designated nonattainment

The applicability analysis involves calculation of the total direct and indirect emissions of criteria or precursor air pollutants during the years of construction of the federal action. If the applicable emissions exceed the *de minimis* thresholds outlined in the General Conformity Rule, then the federal agency would prepare a General Conformity Determination for public comment.

South Central Coast Air Basin General Conformity Thresholds

The General Conformity Rule ensures that actions taken by federal agencies in nonattainment and maintenance areas do not interfere with the state's plans to meet NAAQS. 40 CFR Part 93.153 defines de minimis levels, the minimum threshold for which a conformity determination must be performed, for various criteria pollutants and precursor air pollutants in various areas. If the proposed project's annual emissions are below the applicable de minimis levels, the project is not subject to a general conformity determination.

Based on the federal attainment status for the SCCAB, Table 1 lists the de minimis levels that apply to SCCAB. Because the project site straddles the boundary between Ventura and Santa Barbara counties, Table 1 conservatively identifies the more restrictive threshold for each criteria pollutant. These levels apply to all direct and indirect annual emissions generated during construction and operation of the proposed project under federal agency control.

Table 1 General Conformity De Minimis Emission Rates for the South Central Coast Air Basin

Pollutant	SCCAB Attainment Status Designation	De Minimis Emission Rate (tons/year)
Ozone Precursors (VOC or NO_X)	Serious Nonattainment[1]	50
CO	Unclassified/Attainment	n/a
PM_{10}	Unclassified	n/a
$PM_{2.5}$	Unclassified/Attainment	n/a
SO_2 or NO_2	Unclassified/Attainment	n/a
Lead	Unclassified/Attainment	n/a

SCCAB: South Central Coast Air Basin; VOC: volatile organic compounds; NO_x: nitrogen oxides; CO: carbon monoxide; PM_{10}: particulate matter 10 microns or less in diameter; $PM_{2.5}$: particulate matter 2.5 microns or less in diameter; SO_2: sulfur dioxide; NO_2: nitrogen dioxide

[1] The Ventura County portion of the SCCAB is designated Nonattainment for 8-hour ozone. The Santa Barbara County portion is designated Unclassified/Attainment.

Sources:
California Air Resources Board (CARB). 2018. Area Designations Maps/State and National. Air Quality Planning and Science Division. Last modified: October 2018. https://ww3.arb.ca.gov/desig/adm/adm.htm (accessed September 2022).

Ventura County Air Pollution Control District (VCAPCD). 2017. 2016 Ventura County Air Quality Management Plan. February 14, 2017. http://www.vcapcd.org/pubs/Planning/AQMP/2016/Final/Final-2016-Ventura-County-AQMP.pdf (accessed September 2022).

United States Environmental Protection Agency (USEPA). 2022. "De Minimis Tables." Last modified: July 20, 2022. https://www.epa.gov/general-conformity/de-minimis-tables (accessed September 2022).

Methodology

The sources of construction emissions include exhaust from the combustion of diesel fuel in on-road vehicles and off-road equipment, and fugitive dust from trenching activities. Emissions associated with construction of the proposed project were quantified for reactive organic compounds (ROC), nitrogen oxides (NO_X), carbon monoxide (CO), particulate matter 10 microns or less in diameter (PM_{10}), particulate matter 2.5 microns or less in diameter ($PM_{2.5}$), and sulfur dioxide (SO_2). For the purposes of this evaluation, emissions of nitrogen dioxide (NO_2) were assumed to equal emissions of NO_X, and emissions of sulfur dioxide (SO_2) were assumed to constitute the functional majority of SO_X emissions. The proposed project does not include a source of lead emissions.

The project's construction and operational emissions were calculated using the California Emissions Estimator Model (CalEEMod) software version 2020.4.0. Total annual emissions associated with the proposed project were compared to the *de minimis* thresholds shown in Table 1. In instances in which the *de minimis* threshold differs between Ventura and Santa Barbara counties, this analysis conservatively adopts the more restrictive threshold. Complete modeling results are contained in Appendix A.

Construction Emissions

For the purposes of modeling, the analysis assumed the recommended design alternative would be implemented. The analysis relied upon the following assumptions:

Pipeline

- **Construction Method.** Approximately 7,100 LF pipeline would primarily be constructed via open-trench construction with five-foot-wide trenches. Pipeline construction using open-trench method

would require the use of an excavator, wheeled loader, dump truck, and vibrating compactor. Trenchless HDD construction would be used to cross Rincon Creek, resulting in up to 2,000 LF of trenchless construction. The project would also replace approximately 530 LF of the existing Rincon Main Pipeline. For purposes of this analysis, it was conservatively assumed open-trench, HDD, and replacement pipeline construction would occur simultaneously.

- **Disturbance Area.** The open-trench, HDD, and replacement construction of the proposed pipelines would disturb a total of approximately 0.87 acre (38,100 square feet), with approximately 200 to 300 LF of pipeline constructed per day.
- **Fugitive Dust Control.** Measures pertaining to fugitive dust control, including watering exposed areas, reducing vehicle speeds to 15 miles per hour on unpaved roads, and cleaning/sweeping paved roads, were incorporated into the modeling of construction emissions. Other measures, such as those reducing emissions of ozone precursors, were not incorporated into the modeling of construction emissions, but would also further reduce construction emissions below those presented in this analysis.
- **Material Export and Import.** For open-trench construction, approximately 2,900 cubic yards of soil and pavement would be hauled away. The proposed open-trench construction would total approximately 4,400 LF of open-cut trenching (not including the segment of pipeline to be installed under Rincon Creek via trenchless crossing). Approximately 0.65 cubic yards of soil and/or pavement would be hauled off site for disposal (i.e., not used as trench backfill) per linear foot of pipeline installed (4,400 LF x 0.65 cubic yards per LF of open-cut trenching = 2,900 cubic yards of soil and/or pavement to be hauled off site). Additionally, approximately 500 cubic yards of soils would be removed for HDD construction, based on a 30-inchborehole. Therefore, the total soil removal for open cut trench excavation and HDD is approximately 4,000 cy.
- **Construction Haul and Worker Trips.** Approximately 2,900 cubic yards of soil would be exported off site. CalEEMod assumptions for truck hauling capacity (16 cubic yards of soil per load) was used, equating to approximately 287 haul truck trips to export excavated soil off site. Approximately five truck trips per day would occur for the delivery of construction materials. Therefore, approximately 77 delivery trips are assumed in the analysis. Additionally, approximately 10 two-way worker trips would occur per workday.
- **Construction Schedule and Phases.** Construction of the pipeline is assumed to occur between Summer 2023 and Spring 2025.
- **Pumps and Generators.** Continuous (24-hour) pumps and generators may be needed during trenchless excavation and trenchless pipeline installation. Well pump specifications were based on Model 2P5X 2-inch Engine Driven Portable High Pressure Pumps (approximately 5 HP class; AMT Pump Company 2012). Generator HP was based on Generac MLG8K Mobile Diesel Generator (approximately 13.5 HP; Generac Mobile Products LLC 2019).

Pump Stations and Improvements

- **Disturbance Area.** Construction of BPS-A and BPS-B would consist of one 2,000-square-foot and one 900-square-foot CMU block wall building, respectively. In addition, the ground disturbance for BPS-A would be approximately 25,800 square feet and approximately 8,900 square feet for BPS-B. While the extent of ground disturbance for other improvements to existing Casitas infrastructure is not currently known, it was assumed to be less than 10 percent of the proposed pipeline disturbance area. Therefore, for purposes of impact modeling, the ground disturbance for improvements were overlapped with BPS-B, for a total of 0.29 acre of disturbance area (12,710 square feet).

- **Construction Method.** Typical construction equipment would include an excavator, grader, crane, and standard work trucks.
- **Fugitive Dust Control.** Measures pertaining to fugitive dust control, including watering exposed areas, reducing vehicle speeds to 15 miles per hour on unpaved roads, and cleaning/sweeping paved roads, were incorporated into the modeling of construction emissions. Other measures, such as those reducing emissions of ozone precursors, were not incorporated into the modeling of construction emissions, but would also further reduce construction emissions below those presented in this analysis.
- **Construction Schedule and Phases.** Construction of BPS-A and BPS-B is assumed to occur between Summer 2023 and Spring 2025, and it was conservatively assumed construction of BPS-A and BPS-B would occur simultaneously.

Operational Emissions

Pumps and other electrical equipment installed in the booster pump stations would use electricity from the regional grid. Existing stationary sources (e.g., power plants) are permitted by air districts and/or the USEPA, and are subject to local, state, and federal control measures. Emissions of criteria air pollutants generated at power plants are not attributed to individual projects or electricity users. Therefore, this analysis does not calculate indirect emissions of criteria pollutants from the operational electricity needs of the booster pump stations.

General Conformity Assessment

Table 2 lists the total annual emissions that may be generated during construction of the proposed project compared to the applicable *de minimis* emission rates for the SCCAB region. In addition, Table 2 presents the total emissions for overlapping construction phases (i.e., open-trench construction overlapping HDD construction activity).

Table 2 Proposed Project Total Annual Construction Emissions

	Estimated Annual Construction Emissions (tons/year)					
	ROC	NO_X	CO	PM_{10}	$PM_{2.5}$	SO_2
2023	<1	3	3	<1	<1	<1
2024	<1	3	3	<1	<1	<1
2025	<1	3	3	<1	<1	<1
Maximum Worst-Case Scenario	**<1**	**3**	**3**	**<1**	**<1**	**<1**
De Minimis Thresholds	50	50	n/a	n/a	n/a	n/a
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

VOC: volatile organic compounds; NO_X: nitrogen oxides; CO: carbon monoxide; PM_{10}: particulate matter 10 microns or less in diameter; $PM_{2.5}$: particulate matter 2.5 microns or less in diameter; SO_2: sulfur dioxide

See Appendix A for modeling details and CalEEMod results. Emission data is sourced from "mitigated" results, which include emission reduction measures that would be implemented during project construction.

Source: USEPA. 2022. "De Minimis Tables." Last modified: July 20, 2022. https://www.epa.gov/general-conformity/de-minimis-tables (accessed September 2022).

As shown in Table 2, criteria and precursor pollutant emissions from the project would be below the applicable *de minimis* thresholds for the SCCAB region. Therefore, the general conformity requirements do not apply to these pollutants, and the proposed project is exempt from a conformity determination.

Sincerely,
Rincon Consultants, Inc.

Amanda Antonelli, MESM
Senior Environmental Planner

Jennifer Haddow, PhD
Principal Environmental Scientist

Appendix G

Energy Calculations

Appendix G

Energy Calculation Sheets

CMWD VTA-SB Intertie Project - Pipeline

9/21/2022

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	81	0.73	Site Preparation	28
Rubber Tired Dozers	1	8	247	0.4	Site Preparation	42
Tractors/Loaders/Backhoes	2	8	97	0.37	Site Preparation	34
Bore/Drill Rigs	1	8	221	0.5	Excavation/Shoring	1,776
Concrete/Industrial Saws	1	8	81	0.73	Excavation/Shoring	1,056
Excavators	1	8	158	0.38	Excavation/Shoring	965
Off-Highway Trucks	1	8	402	0.38	Excavation/Shoring	2,455
Rubber Tired Dozers	1	6	247	0.4	Excavation/Shoring	1,191
Tractors/Loaders/Backhoes	2	7	97	0.37	Excavation/Shoring	1,122
Bore/Drill Rigs	1	8	221	0.5	Installation/Backfill	4,579
Cranes	1	4	231	0.29	Installation/Backfill	1,388
Excavators	1	8	158	0.38	Installation/Backfill	2,488
Forklifts	2	6	89	0.2	Installation/Backfill	1,230
Generator Sets	1	24	84	0.74	Installation/Backfill	8,591
Off-Highway Trucks	1	8	402	0.38	Installation/Backfill	6,331
Pumps	1	24	84	0.74	Installation/Backfill	8,591
Rollers	1	8	80	0.38	Installation/Backfill	1,401
Tractors/Loaders/Backhoes	2	8	97	0.37	Installation/Backfill	3,307
Welders	1	8	46	0.45	Installation/Backfill	954
Cement and Mortar Mixers	4	6	9	0.56	Restoration	171
Pavers	1	7	130	0.42	Restoration	485
Rollers	1	7	80	0.38	Restoration	300
Tractors/Loaders/Backhoes	1	7	97	0.37	Restoration	354
					Total Fuel Used	**48,838**
						(Gallons)

Construction Phase	Days of Operation
Site Preparation Phase	1
Excavation/Shoring	38
Installation/Backfill	98
Paving Phase	24
Total Days	161

WORKER TRIPS

Constuction Phase	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
Site Preparation Phase	24.1	10	14.7	6.10
Excavation/Shoring	24.1	10	14.7	231.78
Installation/Backfill	24.1	10	14.7	597.76
Paving Phase	24.1	10	14.7	146.39
0	24.1	10	14.7	0.00
			Total	**982.03**

HAULING AND VENDOR TRIPS

Trip Class	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
HAULING TRIPS				
Site Preparation Phase	7.5	0	0.0	0.00
Excavation/Shoring	7.5	287	20.0	765.33
Installation/Backfill	7.5	77	20.0	205.33
Paving Phase	7.5	0	0.0	0.00
0	7.5	0	0.0	0.00
			Total	**970.67**
VENDOR TRIPS				
Site Preparation Phase	7.5	0	0.0	0.00
Excavation/Shoring	7.5	0	0.0	0.00
Installation/Backfill	7.5		0.0	0.00
Paving Phase	7.5	0	0.0	0.00
0	7.5	0	0.0	0.00
			Total	**-**

Total Gasoline Consumption (gallons)	**982**
Total Diesel Consumption (gallons)	**49,808**

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.

CMWD VTA-SB Intertie Project - Temporary Emer. Pump Station

9/21/2022

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)
Graders	1	8	187	0.41	Site Preparation	32
Skid Steer Loaders	1	8	65	0.37	Site Preparation	11
Tractors/Loaders/Backhoes	1	8	97	0.37	Site Preparation	17
					Total Fuel Used	**61**
						(Gallons)

Construction Phase	Days of Operation
Site Preparation Phase	1
Total Days	1

WORKER TRIPS

Constuction Phase	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
Site Preparation Phase	24.1	10	14.7	6.10
0	24.1	10	14.7	0.00
0	24.1	10	14.7	0.00
0	24.1	10	14.7	0.00
0	24.1	10	14.7	0.00
		Total		**6.10**

HAULING AND VENDOR TRIPS

Trip Class	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
HAULING TRIPS				
Site Preparation Phase	7.5	0	0.0	0.00
0	7.5		20.0	0.00
0	7.5	0	0.0	0.00
0	7.5	0	0.0	0.00
0	7.5	0	0.0	0.00
		Total		**-**
VENDOR TRIPS				
Site Preparation Phase	7.5	0	0.0	0.00
0	7.5	0	0.0	0.00
0	7.5		6.9	0.00
0	7.5	0	0.0	0.00
0	7.5	0	0.0	0.00
		Total		**-**

Total Gasoline Consumption (gallons)	**6**
Total Diesel Consumption (gallons)	**61**

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.

CMWD VTA-SB Intertie Project - BPS-A

9/21/2022

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)
Graders	1	8	187	0.41	Site Preparation	97
Tractors/Loaders/Backhoes	1	8	97	0.37	Site Preparation	51
Excavators	1	8	158	0.38	Grading	152
Graders	1	6	187	0.41	Grading	146
Rubber Tired Loaders	1	6	203	0.36	Grading	139
Tractors/Loaders/Backhoes	1	8	97	0.37	Grading	101
Cranes	1	4	231	0.29	Building Construction	4,334
Forklifts	2	6	89	0.2	Building Construction	3,841
Off-Highway Trucks	1	8	402	0.38	Building Construction	19,767
Tractors/Loaders/Backhoes	2	8	97	0.37	Building Construction	10,326
Air Compressors	1	6	78	0.48	Architecutral Coating	66
Cement and Mortar Mixers	4	6	9	0.56	Paving	36
Pavers	1	7	130	0.42	Paving	101
Rollers	1	7	80	0.38	Paving	63
Tractors/Loaders/Backhoes	1	7	97	0.37	Paving	74
					Total Fuel Used	**39,293 (Gallons)**

Construction Phase	Days of Operation
Site Preparation Phase	3
Grading Phase	6
Building Construction Phase	306
Paving Phase	5
Architectural Coating Phase	5
Total Days	325

WORKER TRIPS

Constuction Phase	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
Site Preparation Phase	24.1	10	14.7	18.30
Grading Phase	24.1	10	14.7	36.60
Building Construction Phase	24.1	10	14.7	1866.47
Paving Phase	24.1	10	14.7	30.50
Architectural Coating Phase	24.1	10	14.7	30.50
			Total	**1,982.37**

HAULING AND VENDOR TRIPS

Trip Class	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
HAULING TRIPS				
Site Preparation Phase	7.5	0	0.0	0.00
Grading Phase	7.5		20.0	0.00
Building Construction Phase	7.5	0	0.0	0.00

Paving Phase	7.5	0	0.0	0.00
Architectural Coating Phase	7.5	0	0.0	0.00
			Total	**-**

VENDOR TRIPS

Site Preparation Phase	7.5	0	0.0	0.00
Grading Phase	7.5	0	0.0	0.00
Building Construction Phase	7.5	0	6.9	0.00
Paving Phase	7.5	0	0.0	0.00
Architectural Coating Phase	7.5	0	0.0	0.00
			Total	**-**

Total Gasoline Consumption (gallons)	**1,982**
Total Diesel Consumption (gallons)	**39,293**

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.

CMWD VTA-SB Intertie Project - BPS-B & Rincon Main Improv.

9/21/2022

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)
Graders	1	8	187	0.41	Site Preparation	97
Tractors/Loaders/Backhoes	1	8	97	0.37	Site Preparation	51
Excavators	1	8	158	0.38	Grading	178
Graders	1	6	187	0.41	Grading	170
Rubber Tired Dozers	1	6	247	0.4	Grading	219
Tractors/Loaders/Backhoes	1	7	97	0.37	Grading	103
Cranes	1	4	231	0.29	Building Construction	4,745
Forklifts	2	6	89	0.2	Building Construction	4,205
Off-Highway Trucks	1	8	402	0.38	Building Construction	21,640
Tractors/Loaders/Backhoes	2	8	97	0.37	Building Construction	11,304
Cement and Mortar Mixers	4	6	9	0.56	Paving	36
Pavers	1	7	130	0.42	Paving	101
Rollers	1	7	80	0.38	Paving	63
Tractors/Loaders/Backhoes	1	7	97	0.37	Paving	74
Air Compressors	1	6	78	0.48	Architecutral Coating	66
					Total Fuel Used	**43,052**
						(Gallons)

Construction Phase	Days of Operation
Site Preparation Phase	3
Grading Phase	7
Building Construction Phase	335
Paving Phase	5
Architectural Coating Phase	5
Total Days	355

WORKER TRIPS

Constuction Phase	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
Site Preparation Phase	24.1	10	14.7	18.30
Grading Phase	24.1	10	14.7	42.70
Building Construction Phase	24.1	10	14.7	2043.36
Paving Phase	24.1	10	14.7	30.50
Architectural Coating Phase	24.1	10	14.7	30.50
			Total	**2,165.35**

HAULING AND VENDOR TRIPS

Trip Class	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
HAULING TRIPS				
Site Preparation Phase	7.5	0	0.0	0.00
Grading Phase	7.5		20.0	0.00
Building Construction Phase	7.5	0	0.0	0.00

Paving Phase	7.5	0	0.0	0.00
Architectural Coating Phase	7.5	0	0.0	0.00
			Total	**-**

VENDOR TRIPS

Site Preparation Phase	7.5	0	0.0	0.00
Grading Phase	7.5	0	0.0	0.00
Building Construction Phase	7.5		6.9	0.00
Paving Phase	7.5	0	0.0	0.00
Architectural Coating Phase	7.5	0	0.0	0.00
			Total	**-**

Total Gasoline Consumption (gallons)	**2,165**
Total Diesel Consumption (gallons)	**43,052**

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.