

CALTRAIN EXTENSION TO MONTEREY COUNTY PASSENGER RAIL STATIONS

VOLUME I DRAFT ENVIRONMENTAL IMPACT REPORT

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Prepared For:



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LIST OF ACRONYMS

AADT	Annual average daily traffic
AAM	Annual arithmetic mean
AAQS	Ambient air quality standards
AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
ACM	Asbestos-containing Material
ACOE	U.S. Army Corps of Engineers
ADA	American with Disabilities Act
ADP	Attainment Demonstration and Reasonable Further Progress Plan
ADWF	Average daily wastewater flow
AF	Acre feet
AMBAG	Association of Monterey Bay Area Governments
APE	Area of potential effects
APS	Agile Port System
AQMP	Air quality management plan
ARA	Aggregate Resource Areas
BA	Biological Assessment
BLM	Bureau of Land Management
BMP	Best Management Practices
B.P.	Before present
CAA	Clean Air Act
CAAQS	California ambient air quality standards
CalEPA	California Environmental Protection Agency
Cal/OSHA	California Office of Safety and Health Administration
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCC	California Coastal Commission
CCDoTT	Center for the Commercial Deployment of Transportation Technologies
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CDMG	California Division of Mines and Geology
CEC	California Energy Commission

CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	Cubic feet per second
CGS	California Geologic Survey
CHRIS	California Historical Resources Information System
CMP	Congestion Management Program for Monterey County
CNDDDB	California Natural Diversity Database
CNEL	Community noise equivalent level
CNPS	California Native Plant Society
CO	Carbon monoxide
CPUC	California Public Utilities Commission
CRHR	California Register of Historic Resources
CUPA	Certified Unified Program Agencies
CWA	Clean Water Act
CWHR	California Wildlife Habitat Relationships program
dB	Decibel
dba	A-weighted decibel
Diesel RRP	Diesel Risk Reduction Plan
DOI	Department of the Interior
DOT	Department of Transportation
DPF	Diesel particulate filters
DTSC	Department of Toxic Substances Control
EA	Environmental Assessment
EIR	Environmental Impact Report
EO	Executive Order
EPA	U.S. Environmental Protection Agency
EPCRA	Emergency Preparedness and Community Right-to-Know Act
ESA	Endangered Species Act of 1973
°F	Degrees Fahrenheit
FCAA	Federal Clean Air Act
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act

FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FPPA	Farmland Protection Policy Act
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
HAP	Hazardous air pollutants
HAZWOPER	Hazardous Waste Operations and Emergency Response
HCM	Highway Capacity Manual
HHS	United States Department of Health and Human Services
Hz	Hertz
ISO	Insurance Services Office
ITC	Intermodal Transportation Center
kW	Kilowatt
lbs/day	Pounds per day
L_{eq}	Equivalent sound level
L_{max}	Maximum sound level
L_p	Sound pressure level
L_x	Percentile-exceeded sound level
LCP	Local Coastal Program
LOS	Level of service
LPA	Locally Preferred Alternative
LUP	Land Use Plan
$\mu\text{g}/\text{m}^3$	Micrograms per cubic meter
MBTA	Migratory Bird Treaty Act
MBUAPCD	Monterey Bay Unified Air Pollution Control District
Mgd	Million gallons per day
MMI	Modified Mercalli Intensity
MOA	Memorandum of Agreement
MP	Mile Post
mph	Miles per hour
MPO	Metropolitan Planning Organization
MRF	Materials Recovery Facility
MRWPCA	Monterey Regional Water Pollution Control Agency
MST	Monterey-Salinas Transit
MWRD	Monterey Water Resources District

NA	not applicable
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO ₂	Nitrogen dioxide
NCAP	North County Area Plan
NOI	Notice of Intent
NO _x	Nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
O ₃	Ozone
PAH	Polynuclear Aromatic Hydrocarbons
Pb	Lead
PCB	Polychlorinated Biphenyls
PCE	Passenger car equivalent
PCJPB	Peninsula Corridor Joint Powers Board
PER	Preliminary Environmental Report
PES	Preliminary Environmental Study
PGA	Peak ground acceleration
PM _{2.5}	Particulate matter of 2.5 microns or less
PM ₁₀	Particulate matter of 10 microns or less
PPC	Public Protection Classification
ppm	Parts per million
PPV	Peak particle velocity
PRC	Public Resources Code
PSR	Project Study Report
PST	Pacific Standard Time
PWWF	Peak Wastewater flow
RCRA	Resource Conservation and Recovery Act
RDA	Redevelopment Agency
REA	Railroad Express Agent
ROG	Reactive organic gas

ROW	Right-of-way
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SamTrans	San Mateo County Transit District
SB	Senate Bill
SCMTD	Santa Cruz Metropolitan Transit District
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO ₂	Sulfur dioxide
SO _x	Sulfur oxides
SRA	Salinas Redevelopment Agency
SPRR	Southern Pacific Railroad
SR	State Route
STIP	State Transportation Improvement Program
SUSMP	Standard Urban Stormwater Mitigation Plan
SVSWA	Salinas Valley Solid Waste Authority
SWANNC	Solid Waste Agency of North Cook County (U.S. Supreme Court ruling)
SWMP	Stormwater Management Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Board
TAC	Toxic air contaminant
TAMC	Transportation Agency for Monterey County
TCM	Traffic control measures
TIFIA	Transportation Infrastructure Finance and Innovation Act
TMP	Traffic Management Plan
tpy	Tons per year
UBC	Uniform Building Code
UPRR	Union Pacific Railroad
U.S.	United States
USACE	United States Army Corps of Engineers
U.S.C.	United States Code
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground storage tank

Vdb	Vibration level
VMT	Vehicle miles traveled
VOC	Volatile organic compounds
WDR	Waste Discharge Requirements

SUMMARY

S.1 PURPOSE AND NEED FOR CALTRAIN EXTENSION TO MONTEREY COUNTY

Note: This EIR is part of a joint NEPA/CEQA document (EA/EIR), but is only being circulated at this time for CEQA review. There are some sections and/or terminology used in this document that are included for NEPA purposes, but have not been removed for this circulation. These instances do not affect the analysis under CEQA.

The purpose of this project is to extend Caltrain service from the existing terminus in Gilroy to Monterey County, including stations in Pajaro, Castroville, and Salinas to accommodate a portion of inter-county commute oriented traffic, provide residual capacity for future travel demand increases, and improve regional air quality. Caltrain is a commuter rail service that runs between Gilroy and San Francisco. Caltrain operates weekday trains between San Francisco and San Jose, with commute-hour service to Gilroy. Weekend service is offered from San Francisco to San Jose.

The proposed extension of Caltrain to Salinas would provide an alternative means of commuter travel between Monterey County and southern Santa Cruz County to the San Francisco Bay Area. In addition to lowering congestion on the roadways, the commuter rail extension would bring a significant increase in ridership to the existing Caltrain service. Other benefits to this new service include an increase in job opportunities, more transportation alternatives for senior citizens and those with physical disabilities, increased access by students to educational resources, and economic development opportunities along the train route.

Currently in the Monterey County and San Francisco Bay areas, job distribution and worker housing distribution patterns do not match. The San Francisco Bay counties have job surpluses and this pull of workers has created a large increase in interregional commuter traffic, leading to highway congestion and poor air quality in the basin. The U.S. Census for 2000 estimates that 18,073 persons living within Monterey County work in another county. Of this number, more than 30 percent are employed within Santa Clara or other Bay Area counties. Available public transportation choices between Monterey County and Santa Clara County are limited to one Greyhound bus trip during the normal northbound (morning) commute period. AMTRAK Coast Starlight trains and motor coach service to the Capitol Corridor, and San Joaquin and Pacific Surfliner trains do not operate during normal northbound commute periods. As a consequence, residents of Monterey County who work in Santa Clara County and points north must use private vehicles to travel between home and work.

S.2 ALTERNATIVES

Three alternatives are evaluated in this Environmental Assessment/Environmental Impact Report – two project alternatives and the no-build alternative (Table S-1).

1. Locally Preferred Alternative (LPA)
2. Alternate Castroville Passenger Station Site Alternative
3. No-Build (No-Project) Alternative

Table S-1

Caltrain Extension to Monterey County Passenger Rail Stations Alternatives

	PROJECT ALTERNATIVES		NO-BUILD (NO-PROJECT) ALTERNATIVE
	Locally Preferred Alternative (LPA)	Alternate Castroville Site	
Pajaro Passenger Station	Site #1	Site #1	--
Castroville Passenger Station	Site #2	Site #1	--
Salinas Layover Yard Facility	Site #2	Site #2	--
Salinas ITC Expansion	Configuration 17 or Configuration 18	Configuration 17 or Configuration 18	--

Source: Parsons, 2005.

S.2.1 Locally Preferred Alternative (LPA)

The Locally Preferred Alternative (LPA) would provide commuter rail Caltrain diesel service connecting Salinas, Castroville, and Pajaro to existing Caltrain service serving Santa Clara, San Mateo, and San Francisco counties. The proposed project sites are located along the Union Pacific Railroad (UPRR) main line between Gilroy and Salinas, California. Specific improvements would take place in Salinas, Pajaro (Watsonville Junction), and Castroville in Monterey County, California.

Pajaro Passenger Station at Site #1 (Watsonville Junction)

The LPA Pajaro station site would be adjacent to Salinas Road and would permit future direct interface with the Santa Cruz branch line. The site would be accessible to Salinas Road and the Pajaro community, would allow expansion of

parking if needed in the future, and would satisfy UPRR's preference for development for "coastside" stations.

Castroville Passenger Station at Site #2 (North of State Route 156)

The LPA Castroville site would be situated north of State Route 156. This site is currently agricultural land and would afford greater flexibility in developing the passenger station, access and circulation, and parking facilities.

Salinas Layover Yard Facility at Site #2

The Salinas Layover Yard Facility at Site #2 lies southwest of the main line track and would be located immediately west of the existing Amtrak passenger depot. This site would provide adequate space for train consist layover and train crew automobile parking. The layover facility, which would consist of four tracks and associated minor support facilities, would be located northwest of the passenger station and Intermodal Transportation Center (ITC) area.

Intermodal Transportation Center (ITC) Expansion

The Salinas ITC Expansion site has two potential configurations. Ultimately either Configuration #17 or Configuration #18 will be constructed; however, for purposes of this environmental analysis both configurations will be analyzed jointly in their entirety for potential environmental impacts.

Salinas ITC Expansion Site Configuration #17

Configuration #17 could be developed in two phases. The first phase would include 6 bus berths for intercity buses, 13 bus berths for MST intracounty buses, and a taxi waiting area, bike lockers and short term parking spaces, and a passenger drop off area. Lincoln Avenue would be extended and approximately 300 surface parking spaces would be provided. A station track would lead from the main line and allow passenger access. The second phase of development would include a 4-level parking garage with 700 spaces and storage, replacing the 300 surface parking spaces constructed in the first phase.

Salinas ITC Expansion Site Configuration #18

Configuration #18 would rely exclusively on surface parking; the 4-level parking garage would not be built with this configuration. A total of 663 surface parking spaces would be provided in three lots which could be constructed in phases. The station track and layover facility configuration would not differ from Configuration #17.

S.2.2 Alternate Castroville Site Alternative

The Alternate Castroville Site Alternative has exactly the same site mix as the Locally Preferred Alternative (Pajaro Passenger Station at Site #1, Salinas Layover Yard Facility at Site #2, and Salinas ITC Expansion Configurations 17 or 18) with the exception of the Castroville site (Table S-1). Because Castroville Passenger Station at Site #2 has the potential for a significant adverse impact to agriculture, per CEQA regulations, an alternative site must be evaluated for the possibility of avoiding or lessening the identified potential significant adverse impact.

Castroville Passenger Station at Site #1 (Del Monte Avenue)

Castroville Passenger Station at Site #1 was selected as the alternate site for environmental analysis. This site lies approximately one mile south of Castroville Passenger Station at Site #2 and is adjacent to Del Monte Avenue south of State Route 156. This area is surrounded by industrial land uses and was the historical location of the Castroville Depot. Castroville Passenger Station at Site #1 would use the area formerly occupied by the Castroville Depot that serviced the Coast main line and the Monterey branch line. This site would use Del Monte Avenue for all parking and traffic circulation. In the event that passenger rail service was instituted on the Monterey Branch line to Castroville, adjacent warehouse land would be purchased to provide parking capacity.

S.2.3 No-Build (No-Project) Alternative

The No-Build Alternative constitutes the No-Project Alternative for purposes of the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The No-Build Alternative assumes that the following will not occur:

- rehabilitation and expansion of the Salinas station;
- construction of a layover facility at Salinas;
- construction of new stations at Castroville and Pajaro;
- minor track improvements between Gilroy and Salinas; and
- limited equipment acquisition.

S.3 SUMMARY OF ENVIRONMENTAL IMPACTS AND PROPOSED MITIGATION MEASURES

A summary of the environmental impacts and proposed mitigation measures is presented in Table S-2.

Table S-2

Summary of Impacts and Mitigation Measures

Impact	Pre-mitigation Significance	Mitigation Measure	Significance after Mitigation
3.1. Visual Resources			
VR-1: Will the Project have a substantial effect on a scenic vista?	Less than significant	No mitigation necessary.	Less than significant
VR-2: Will the Project substantially damage scenic resources along a designated scenic highway?	No impact-Alternate Castroville Site; Potentially significant - LPA	No mitigation necessary. VR-2: Conduct a visual impact analysis on Highway 156 at Castroville Site No. 2.	No impact Less than significant
VR-3: Will the Project substantially degrade the existing visual character or quality of the site and its surroundings?	Significant	VR-3a: Incorporation of design standards to preserve historic visual character of the area. VR-3b: Design parking to be compatible with surrounding character and setting.	Less than significant
VR-4: Will the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Potentially significant	VR-4: Prepare an Exterior Lighting Design, in accordance with Monterey County General Plan Policy ER-9.8, along with implementation of Mitigation Measure VR-2, conduct a visual impact analysis of affected residential properties.	Less than significant
VR-C1: Will the project have significant cumulative aesthetic impacts?	Potentially significant	Implement Mitigation Measures VR-3a and VR-3b, as shown above.	Less than significant.
3.2. Air Quality			
AQ-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?	Less than significant	No mitigation necessary.	Less than significant
AQ-2: Would the project violate any air quality standard or contribute substantially to an existing or project air quality violation?	Less than significant	No mitigation necessary.	Less than significant

Table S-2

Summary of Impacts and Mitigation Measures

Impact	Pre-mitigation Significance	Mitigation Measure	Significance after Mitigation
AQ-3: Would the project expose sensitive receptors to substantial pollutant concentrations?	Less than significant	No mitigation necessary.	Less than significant
AQ-4: Would the project create or expose a substantial number of people to objectional odors	No impact	No mitigation necessary.	No impact
AQ-C1: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	Less than significant	No mitigation necessary.	Less than significant
3.3. Biological Resources			
BIO-1: Will the project cause loss of individuals or occupied habitat of endangered, threatened, or rare fish, wildlife or plant species?	Potentially significant	BIO-1: Conduct floristically-based special-status plant surveys for Congdon's tarplant at Castroville sites and if found, redesign the project to avoid the plants or provide compensation and habitat restoration.	Less than significant
BIO-2: Will the project cause loss of individuals of CNPS List 2, 3, or 4 plant species?	Less than significant	No mitigation necessary.	Less than significant
BIO-3: Will the project cause loss of active raptor nest or other breeding sites?	Less than significant	No mitigation necessary.	Less than significant
BIO-4: Will the project cause a permanent loss of sensitive wildlife habitats?	Less than significant	No mitigation necessary.	Less than significant
BIO-5: Will the project cause a permanent loss of sensitive native plant communities?	No impact	No mitigation necessary.	No impact

Table S-2

Summary of Impacts and Mitigation Measures

Impact	Pre-mitigation Significance	Mitigation Measure	Significance after Mitigation
BIO-6: Will the project substantially block or disrupt major fish or wildlife migration or travel corridors?	No impact	No mitigation necessary.	No impact
BIO-7: Will 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?	No impact	No mitigation necessary.	No impact
BIO-8: Will the Project destroy wetlands or waters of the U.S. or waters of the State?	No impact – Alternate Castroville Site Potentially significant - LPA	No mitigation necessary. BIO-8: Avoid wetlands to the extent feasible and compensate for any wetlands that cannot be avoided.	No impact Less than significant
BIO-C1: Will the project have significant cumulative impacts to biological resources?	Less than significant	No mitigation necessary.	Less than significant
3.4. Cultural Resources			
CR-1: Will the project cause a substantial adverse change in the significance of historical resources as defined in Section 15064.5?	Significant.	CR-1: Adhere to the Secretary of the Interior’s Standards for the Treatment of Historic Properties (36 CFR Part 68).	Less than significant
CR-2: Will the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	Significant	CR-2: Protect archaeological resources.	Less than significant
CR-3: Will the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	No impact	No mitigation necessary.	No impact
CR-4: Will the project disturb any human remains, including those interred outside of formal cemeteries?	Significant	CR-4: Protect human remains.	Less than significant

Table S-2

Summary of Impacts and Mitigation Measures

Impact	Pre-mitigation Significance	Mitigation Measure	Significance after Mitigation
CR-C1: Will the project have the potential to have a cumulative impact on cultural resources?	No impact	No mitigation necessary.	No impact
3.5. Geology, Soils, and Seismicity			
GEO-1: Will the Project be located within an area of unstable slope conditions?	No impact	No mitigation necessary.	No impact
GEO-2: Will the Project be located within an area of unstable slope conditions?	No impact	No mitigation necessary.	No impact
GEO-3: Will the Project be located in areas with soils and groundwater conditions that are susceptible to liquefaction during an earthquake?	Potentially significant	GEO-3: Minimize risk of liquefaction damage by applying standard design and construction practices.	Less than significant
GEO-4: Will earthquake-induced strong ground shaking damage Project facilities?	Potentially significant	GEO-4: Minimize damage due to ground shaking by applying standard structural engineering design and construction practices.	Less than significant
GEO-5: Will construction of the Project cause off-site water-related soil erosion?	No impact	No mitigation necessary.	No impact
GEO-6: Will the Project be exposed to damage due to expansive soils?	Less than significant	No mitigation necessary.	Less than significant
GEO-C1: Will the Project have the potential to have a cumulative geologic hazard impact?	Less than significant	No mitigation necessary.	Less than significant
3.6. Hazards and Hazardous Materials			
HM-1: Will the Project create a hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	Less than significant	No mitigation necessary.	Less than significant

Table S-2

Summary of Impacts and Mitigation Measures

Impact	Pre-mitigation Significance	Mitigation Measure	Significance after Mitigation
HM-2: Will the Project create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials?	Less than significant	No mitigation necessary.	Less than significant
HM-3: Will the Project release hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Less than significant	No mitigation necessary.	Less than significant
HM-4: Will the Project expose workers or the public to hazards from a known hazardous waste site as identified pursuant to Government Code Section 65962.5 (Cortese List)?	Significant	HM-1a: Update Phase I Site Assessment summarizing reported releases of hazardous materials within the project area prior to construction. HM-1b: Monitor soil and groundwater during construction for evidence of hazardous waste. HM-1c: Containerize and test suspect soil and groundwater prior to disposal. HM-1d: Inspect and Test for ACM and lead-based paint.	Less than significant
HM-C1: Will the project have the potential to have a cumulative impact on hazardous materials or hazardous waste management?	Less than significant	No mitigation necessary.	Less than significant

3.7. Hydrology and Water Quality

HYDRO-1: Will the Project violate any surface water or groundwater quality standards or waste discharge requirements or cause a substantial degradation of surface runoff quality?	Less than significant	No mitigation necessary.	Less than significant
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Table S-2

Summary of Impacts and Mitigation Measures

Impact	Pre-mitigation Significance	Mitigation Measure	Significance after Mitigation
HYDRO-2: Will the Project cause water-related erosion or siltation on- or off-site?	Less than significant	No mitigation necessary.	Less than significant
HYDRO-3: Will the Project cause increased runoff or flooding?	Less than significant	No mitigation necessary.	Less than significant
HYDRO-4: Will the Project create or contribute stormwater that would exceed the capacity of existing or planned stormwater drainage systems?	Less than significant	No mitigation necessary.	Less than significant
HYDRO-5: Will the Project deplete groundwater supplies or interfere with groundwater recharge?	Less than significant	No mitigation necessary.	Less than significant
HYDRO-6: Will the Project imperil people or structures by causing flooding, including inundation due to levee or dam failure?	Less than significant	No mitigation necessary.	Less than significant
HYDRO-7: Will the Project place structures or housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	Less than significant	No mitigation necessary.	Less than significant
HYDRO-C1: Will the project have significant cumulative impacts to hydrology and water quality?	Less than significant	No mitigation necessary.	Less than significant

3.8. Land Use and Planning

LU-1 Will the Project be inconsistent with County or City zoning ordinances?	Less than significant-Alternative Castroville Site Potentially significant-LPA	No mitigation necessary. LU-1: Rezone properties	Less than significant Less than significant
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Table S-2

Summary of Impacts and Mitigation Measures

Impact	Pre-mitigation Significance	Mitigation Measure	Significance after Mitigation
LU-2: Will the Project increase potential for conflict as a result of incompatible land uses?	Less than significant- Alternate Castroville Site Potentially significant-LPA	No mitigation necessary. LU-2: Design project to be compatible with surrounding land use.	Less than significant Less than significant
LU-C1: Will the Project result in cumulative impacts on land uses?	Less than significant	No mitigation necessary.	Less than significant
3.9. Agriculture			
AG-1: Will the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use?	No impact – Alternate Castroville Site Less than significant-LPA	No mitigation necessary. AG-1: Purchase of development rights, conservation easements or transfer of development rights.	No impact Less than significant
AG-2: Will the Project conflict with existing zoning for agricultural use or a Williamson Act?	No impact – Alternate Castroville Site Significant-LPA	No mitigation necessary. AG-2: Rezoning of Castroville Passenger Station Site.	No impact Less than significant
AG-3: Will 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?	Less than significant	No mitigation necessary.	Less than significant
AG-C1: Will the project have the potential to have a cumulative impact on agriculture?	Less than significant	No mitigation necessary.	Less than significant

Table S-2

Summary of Impacts and Mitigation Measures

Impact	Pre-mitigation Significance	Mitigation Measure	Significance after Mitigation
3.10. Noise			
NO-1: Would the Project expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of lead or responsible agencies?	Significant	NO-1: Utilize special horn designs or establish quiet zones.	Less than significant
NO-2: Would the Project expose persons to or generate excessive groundborne vibration or groundborne noise levels?	No impact	No mitigation necessary.	No impact.
NO-3: Would the Project cause a substantial permanent increase in ambient noise levels in the project vicinity?	Less than significant	NO-1: Utilize special horn designs or establish quiet zones.	Less than significant
NO-4: Would the Project cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity?	Significant	NO-4: Implement Best Management Practices during construction of the project.	Less than significant
NO-5: 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 expose people residing or working in the project area to excessive noise levels?	No impact	No mitigation necessary.	No impact
NO-6: For a project within the vicinity of a private airstrip, would the Project expose people residing or working in the project area to excessive noise levels?	No impact	No mitigation necessary.	No impact
NO-1c: Will the Project have the potential to generate cumulative noise impacts in excess of standards or cause a substantial increase in noise levels above existing levels in the project vicinity?	Potentially significant	Regionally, noise impacts from increased service on the rail lines could be minimized by implementation of additional noise abatement methods such as limited use of train horns, as described above in Mitigation Measure NO-1.	Less than significant.

Table S-2

Summary of Impacts and Mitigation Measures

Impact	Pre-mitigation Significance	Mitigation Measure	Significance after Mitigation
3.11. Socioeconomics			
PH-1: Would the Project induce substantial 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)?	Significant	PH-1A: Implement Monterey County and City of Salinas Growth Management Policies PH-1B: Implement TAMC Transportation-Related Principles	Less than significant
PH-2: Would the Project displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?	Potentially significant	PH-2: Implement procedures for residential acquisition and relocation consistent with City of Salinas Redevelopment Agency requirements and the federal Uniform Act (49 CFR 24C Section 24.205).	Less than significant
PH-3: Would the Project displace substantial numbers of existing businesses or jobs, requiring relocation of businesses or employees elsewhere?	Potentially significant	PH-3: Implement procedures for business property acquisition and relocation consistent with City and County requirements and the federal Uniform Act (49 CFR 24C Section 24.205).	Less than significant
PH-1c: Would the Project have the potential to have a cumulative impact on population, housing, or socio-economics?	Less than significant	No mitigation is necessary.	Less than significant
3.12. Public Services, Utilities, and Service Systems			
PSU-1: Will the Project increase demand for police, fire, water, wastewater treatment and disposal, or solid waste removal to such a degree that accepted service standards are not maintained?	Less than significant	No mitigation is necessary.	Less than significant

Table S-2

Summary of Impacts and Mitigation Measures

Impact	Pre-mitigation Significance	Mitigation Measure	Significance after Mitigation
PSU-2: Will project construction disrupt police, fire, water, wastewater treatment and disposal, or solid waste removal to such a degree that accepted service standards are not maintained?	Less than significant	No mitigation is necessary.	Less than significant
PSU-3: Will the project construction and/or permanent operation result in greater demand for school, library, and park facilities and services?	Less than significant	No mitigation is necessary.	Less than significant
PSU-C1: Will the project have significant cumulative impacts to public services and utility resources?	Less than significant	No mitigation is necessary.	Less than significant
3.13. Parks and Recreation			
PR-1: Would the project increase the use of existing recreational facilities, including neighborhood and regional parks, such that substantial physical deterioration of the existing facilities would occur or be accelerated?	Less than significant	No mitigation is necessary.	Less than significant
PR-2: Would the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	No impact	No mitigation is necessary.	No impact
PR-3: Would the project preclude or substantially limit the use of existing park and recreational facilities by the general public?	Potentially significant	PR-3: Prepare a Traffic Management Plan to Accommodate Parking around the Harvey-Baker House during Project Construction.	Less than significant
PR-C-1. Would the proposed project result in cumulative impacts to parkland and recreation?	Less than significant	No mitigation is necessary.	Less than significant

Table S-2

Summary of Impacts and Mitigation Measures

Impact	Pre-mitigation Significance	Mitigation Measure	Significance after Mitigation
3.14. Traffic			
TC-1: Will Project cause the 5-year or 10-year (cumulative) no project LOS at an analysis location—to worsen from LOS C or better to LOS D or worse?	Significant	TC-1: Install traffic signal at Salinas Road and Railroad Avenue in Pajaro.	Less than significant
TC-2: Will the Project cause the existing or cumulative no project LOS at an analysis location within the City of Salinas or unincorporated Monterey County to worsen from LOS D or better to LOS E or worse?	Significant	TC-1: Install traffic signal at Salinas Road and Railroad Avenue in Pajaro.	Less than significant
TC-3: Will the Project worsen already (or projected) unacceptable operations at an analysis location?	Significant	TC-3 Install traffic signal at Salinas Road and Railroad Avenue in Pajaro; reroute MST bus routes as needed to avoid congestion at Salinas Road and West Market Street.	Less than significant
TC-4: Will the Project create an inconsistency with policies concerning roadway systems set forth in the General Plans for the City of Salinas and Monterey County?	No impact	No mitigation necessary.	No impact
TC-5: Will the Project create the demand for public transit service above that which is provided, or planned to be provided?	Less than significant	No mitigation necessary.	Less than significant
TC-6: Will the Project disrupt or interfere with existing or planned public transit services or facilities?	No impact	No mitigation necessary.	No impact
TC-7: Will the Project create an inconsistency with policies concerning transit systems set forth in the General Plans for the City of Salinas and Monterey County?	No impact	No mitigation necessary.	No impact
TC-8: Will the Project disrupt or interfere with existing or planned bicycle or pedestrian facilities?	No impact	No mitigation necessary.	No impact

Table S-2

Summary of Impacts and Mitigation Measures

Impact	Pre-mitigation Significance	Mitigation Measure	Significance after Mitigation
TC-9: Will the Project create an unmet need for bicycle or pedestrian facilities?	Less than significant	No mitigation necessary.	Less than significant
TC-10: Will the Project create an inconsistency with policies related to bicycle or pedestrian systems in the General Plans of the City of Salinas and Monterey County?	No impact	No mitigation necessary.	No impact
TC-C1: Will the Project have the potential to have a cumulative impact on traffic and circulation?	Less than significant	No mitigation necessary.	Less than significant

S.4 INCLUSION IN THE REGIONAL TRANSPORTATION PLAN

The Final 2005 Monterey County Regional Transportation Plan (RTP) identifies the Caltrain-commuter rail extension to Salinas as part of its planned new passenger rail services (TAMC, 2005b). The RTP states, “TAMC plans to extend the existing Caltrain commuter rail service (between San Francisco and Gilroy) south to Salinas. The extension will include three new station stops: Pajaro, Castroville, and Salinas. At its inception, the service would consist of two round trips per day running from Salinas to San Francisco and will be increased to four or more round trips as demand warrants, probably within 10 years from start of service.”

The RTP includes goals, objectives and policies outlining how the significant regional transportation needs that are described in the plan will be met over the life of the plan through development of a regional transportation network that accommodates all modes of transportation. The goals and objectives that pertain to the project include the following:

Goal 1.4: Provide viable rail facilities for commuters and travelers that accommodate convenient, reliable, and accessible rail transportation to and from Monterey County, enhancing mobility and access of the transportation network.

Objective 1: Extend Caltrain commuter service from Gilroy to Salinas by 2009.

The RTP includes elements of the project in its overall Constrained Project List (Appendix D of the 2005 Final RTP). Elements applicable to the proposed project are shown in Table S-3, below:

Table S-3

Regional Transportation Program Constrained Projects List

RTP ID	Agency	Title/Description	Constrained Funding ⁽¹⁾
MYC018	County	Castroville Blvd. Bike Path Connection under RR	\$750,000
MST042	MST	Salinas Intermodal Center - Construct new ITC	\$8,138,000
TAM006	TAMC	Castroville Rail Station	\$11,150,000 ⁽²⁾
TAM007	TAMC	Commuter Rail Operations (Operating costs to run two round trips per day, to increase to four trips within 10 years.	\$64,900,000 ⁽³⁾
TAM009	TAMC	Commuter Rail Track Access/Track Improvements between Gilroy and Salinas	\$5,000,000
TAM012	TAMC	Gilroy Yard Improvements	\$3,170,000
TAM016	TAMC	Pajaro Rail Station	\$6,585,000
TAM024	TAMC	Salinas Station	\$31,577,000

Source: Appendix D of the Monterey County Regional Transportation Plan, 2005b (Final).

(1) Funding occurs in Present-2010 unless otherwise noted.

(2) \$5,250,000 in Present-2010; \$5,900,000 in 2011-2020.

(3) \$5,900,000 in Present-2010; \$29,500,000 in 2011-2020; \$29,500,000 in 2021-2030.

S.5 PROPOSED FUNDING SOURCES

TAMC is the local agency that distributes state and federal money for local and regional transportation projects in Monterey County. TAMC is responsible for administering specific funding programs created under the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. These funding programs have been continued under the Transportation Equity Act of the 21st Century and the Safe Accountable Flexible Efficient Transportation Equity Act (SAFETEA of 2003: A Legacy for Users (U.S. Department of Transportation, 2003). TAMC is responsible for distributing money for public transit, rail, local street and road maintenance, highway, bicycle and pedestrian facilities.

The proposed budget for the Caltrain Extension from Gilroy to Salinas project is \$75 million (2005 dollars), divided as \$8 million for the Salinas bus facility and \$67 million for the rail project, including a layover facility and commuter parking in Salinas, a station and parking in Castroville, and a station and parking in Pajaro, in addition to track upgrades in Gilroy and between Gilroy and Salinas (TAMC, 2005a).

Funding for the project is drawn from a variety of sources, principally the State Traffic Congestion Relief Program, the State Proposition 116-Clean Air Transportation Improvement Act funds rail bonds, State Transportation Improvement Program (STIP), federal earmark source funds, and Congestion Mitigation and Air Quality Improvement (CMAQ) funding. A proposed application for Federal Transit Administration Section 5309 New Rail Start Grants in the amount of \$29.5 million fills the gap between the available funding and the estimated total project cost (TAMC, 2005a).

Net annual operating costs will be funded through a sales tax measure and/or local transit operating funds. A general election ballot initiative will go before voters in 2006 (TAMC, 2005a).

S.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 15126.6 of the CEQA Guidelines specifies that an EIR must evaluate the comparative merits of a reasonable range of alternatives to the project or project location that feasibly could attain most of the basic project objectives, and that would avoid or substantially lessen the significant environmental impacts of the proposed project. Additionally, a Draft EIR must evaluate potential environmental effects of the No Project Alternative, defined as the case where the proposed Project, as specified and located, would not occur.

The main objectives of the proposed extension of Caltrain to Salinas would:

- Provide an alternative means of travel between Monterey and southern Santa Cruz Counties to Santa Clara, San Mateo, San Jose and the San Francisco Bay Area.
- Reduces and mitigates the need for constructing additional lanes on highways and roads in Monterey County.
- Increase ridership on the existing Caltrain service.
- Indirectly result in an increase in job opportunities.
- Provide more transportation alternatives for senior citizens and those with physical disabilities.
- Increase access by students to educational resources.
- Increase economic development opportunities along the train route.
- Facilitate access to jobs, health care, and shopping in San Francisco and other northern counties.

Reasonable project alternatives have been evaluated and analyzed to determine their feasibility and impacts in comparison to the Project. The alternatives analyzed in this EIR include the following:

- No Build (No Project);
- Locally Preferred Alternative, which includes Pajaro Passenger Station at Site #1, Castroville Site #2, Salinas Layover Yard Facility at Site #2, and Salinas ITC. The ITC includes two alternatives for parking (Configuration 17 and Configuration 18).
- Alternative Castroville Site Alternative. This alternative is identical to the Locally Preferred Alternative (including the Pajaro Passenger Station at Site #1, Salinas Layover Yard Facility at Site #2, and Salinas ITC Expansion Configurations 17 or 18) except for the Castroville Passenger Station site, which is Castroville Site #1 in this Alternative.

While meeting all of the project objectives outlined above, the LPA (proposed project) results in more significant impacts or impacts that result in a higher level of disturbance than the other alternatives considered in this document.

As discussed in Section 5.0, the No Project alternative would have fewer impacts to local traffic, agriculture, population and housing, growth inducements, and cultural resources compared to the LPA. Because the No Project Alternative assumes that no development of the project would occur, this alternative is the least environmentally damaging. However, the No Project Alternative would be the most environmentally damaging insofar as regional traffic and air quality, and would not allow the applicant to achieve the project objectives.

The Alternative Castroville site would have similar impacts to the LPA, except for agricultural impacts, which would be slightly less than with the LPA. However, due to the more industrial location of the station at the Alternative Castroville Site, this alternative would result in an increase in traffic circulation impacts and congestion, would likely result in lower ridership on the services, and would not be expected to reduce any of the significant and unavoidable cumulative impacts.

For these reasons, the proposed project is considered the environmentally superior alternative.

S.7 ISSUES TO BE RESOLVED

The CEQA Guidelines (Section 15123(b)(2)) require the summary section of an EIR to identify areas of controversy or expressed concern known to the Lead Agency, including issues raised by agencies and the public. Issues of concern raised by regional and local agencies and the public were identified through written responses received on the Notice

of Preparation. The list below identifies areas of concern that were raised about the project and the section in which the issue is evaluated:

Purpose and Need; Policies; Funding; Alternatives (Sections 1.0, 2.0, and 5.0)

- Associated operating costs and capital costs, and project timeline.
- Determination of need for the project and discussion of all alternatives considered.
- Coastal development permit required.

Public Outreach (Section 6.0)

- Public Outreach/Environmental Justice outreach to minority, migrant and agricultural community.

Visual (Section 3.1)

- Aesthetics qualities or impacts at each station.

Air Quality (Section 3.2)

- Control and mitigation of construction emissions.
- Direct and indirect source emissions from operational activities.
- Project operational and construction particulate matter (PM₁₀) emissions should be quantified.
- Exposure of air quality impacts to sensitive receptors.

Hazards/Hazardous Materials (Section 3.6)

- Discussion and analysis of any onsite potential hazardous materials.

Hydrology/Water Quality (Section 3.7)

- Potential drainage impacts to Route 183.
- Discussion of drainage issues and identification of measures that will avoid erosion and the discharge of polluted runoff both during and after construction.
- Compliance with Section 404 permits.

Land Use (Section 3.8)

- Station design in compliance with ADA, safety, and legal requirements.
- Discussion of transit-oriented development near stations.
- Evaluations of the impact of the proposed project on existing Gilroy station and maintenance yard.

Noise (Section 3.10)

- Control and mitigation of construction noise emissions.

Traffic (Section 3.14)

- Show project is identified by and consistent with the Monterey County Regional Transportation Plan.
- Consult with Caltrans District 5 staff on the scope of the traffic study area.
- Show level of services (LOS) methodologies and calculations.
- Discussion and analysis of existing and cumulative traffic volumes within study area, trip reduction measures, operational/queuing analysis to determine the impact of the proposed project on traffic operations on State Route 156 and State Route 183, and recommendations for any new grade crossings and the need for grade separations or crossings over or under rail lines.
- Provide information on proposed service schedule and frequency.
- Exclusive use of park-and-ride lots at all three stations for train riders.
- Estimated weekly/monthly ridership at each station.
- The potential interface between the proposed project and the proposed intercity rail service between San Francisco and Monterey at the Salinas, Pajaro and Castroville stations.

S.8 REFERENCES

Transportation Agency for Monterey County (TAMC), 2005a. *TAMC Rail Policy Committee Monterey County Fixed Guideway Project Budget Memorandum*. May 2.

TAMC, 2005b. *Final 2005 Monterey County Regional Transportation Plan*.

1.0 PROPOSED PROJECT

1.1 INTRODUCTION

Note: This EIR is part of a joint NEPA/CEQA document (EA/EIR), but is only being circulated at this time for CEQA review. There are some sections and/or terminology used in this document that are included for NEPA purposes, but have not been removed for this circulation. These instances do not affect the analysis under CEQA.

The Transportation Agency for Monterey County (TAMC) as the lead agency proposes to extend Caltrain commuter rail service from Gilroy south to Salinas. Caltrain is a commuter rail service that runs between Gilroy and San Francisco. Caltrain operates weekday trains between San Francisco and San Jose, with commute-hour service to Gilroy. Weekend service is offered from San Francisco to San Jose. The rail extension would include three new station stops—Pajaro, Castroville, and Salinas—and would operate on existing Union Pacific Railroad (UPRR) track. Figure 1-1 shows the regional location and the project vicinity.

At its inception, the service would consist of two round trips per weekday running from Salinas to Gilroy and would be increased to four or more round trips after five years or as passenger demands require. The proposed project would require the rehabilitation and expansion of the Salinas station, construction of two new stations, construction of a train layover facility in Salinas, minor track improvements (the majority of the track is already in place and in good condition), and limited equipment acquisition. Project completion is anticipated to be completed in five phases:

1. environmental review, preliminary design, and permit acquisition;
2. preparation of project plans and specifications;
3. right of way acquisition;
4. construction and procurement; and
5. service and operations.

Railway improvements to the existing UPRR main line to allow Caltrain to extend service from Gilroy in Santa Clara County through San Benito County to Salinas in Monterey County are exempt from the California Environmental Quality Act (CEQA) by statute (Public Resources Code 21080 [b] [10]). However, elements of the Caltrain extension that involve purchase of new right-of way, such as the proposed acquisition of right-of-way for new railway stations (the present project), require CEQA disclosure.

In a separate but related effort, the Santa Cruz County Regional Transportation Commission is taking preliminary steps to acquire the branch of the existing UPRR railway, which is built to the west of the main line at Watsonville Junction to Santa Cruz and Davenport. The Santa Cruz and Davenport rail line acquisition project is undergoing

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Vicinity Map/Project Sites

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Figure 1-1

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separate environmental review. As part of its approval for Proposition 116 funds, the proposed recreational rail service would also undergo environmental review. TAMC purchased the Monterey Branch line from UPRR in 2004 and is sponsoring alternatives analysis, environmental studies, and right-of-way investigations for utilizing the Monterey Branch line from Castroville to Monterey.

An Initial Study was prepared pursuant to Section 15063 of the CEQA guidelines, and was circulated to notify the public and interested agencies of the proposed project. The intent of the Initial Study was to solicit comments about the environmental impacts of the project and to request assistance from stakeholders in identifying key issues that the EA/EIR should address and evaluate. A copy of the Initial Study and Notice of Preparation, and comments received on the Initial Study, are included in Appendix A. A Project Study Report (PSR) has also been prepared (Parsons 2005).

The EA/EIR is undertaking environmental review at an equal level of detail for the Locally Preferred Alternative (LPA) and Alternate Castroville Site Alternative. These improvements have been formulated at the project level of detail such that this EA/EIR may be prepared pursuant to Section 15161 of the CEQA guidelines, and ensure appropriate environmental review commensurate with project planning and engineering completed to date.

1.2 PURPOSE AND NEED FOR THE PROJECT

1.2.1 Purpose

The project purpose is to provide extended Caltrain service from the existing terminus in Gilroy to Monterey County. This includes stations in Pajaro, Castroville, and Salinas to relieve congestion, provide residual capacity, improve regional air quality, increase regional ridership, and provide transportation alternatives for commuters and residents traveling from Monterey County and southern Santa Cruz County to the San Francisco Bay Area.

The proposed extension of Caltrain to Salinas would provide an alternative means of travel between these counties, thereby reducing congestion along Highway 101 into Santa Clara, San Mateo, and San Francisco counties, and improving regional air quality. The proposed rail service is also a cost effective alternative to widening U. S. Highway 101 or constructing the Prunedale Bypass in Monterey County.

In addition to lowering congestion on the roadways, the commuter rail extension would bring a significant increase in ridership to the existing Caltrain service. Other benefits to this new service include an increase in job opportunities, more transportation alternatives for senior citizens and those with physical disabilities, increased access by students to educational resources, and economic development opportunities along the train route.

1.2.2 Need

Currently in the Monterey County and San Francisco Bay areas, job distribution and worker housing distribution patterns do not match. The northern counties of the San Francisco Bay Area have job surpluses, requiring non-residents to fill the available positions (Metropolitan Transportation Commission). This pull of workers has created a large increase in interregional commuter traffic, leading to highway congestion and poor air quality in the basin.

The U.S. Census for 2000 estimates that 18,073 persons living within Monterey County work in another county. Of this number, more than 30 percent are employed within Santa Clara or other Bay Area counties. Available public transportation choices between Monterey County and Santa Clara County are limited to one Greyhound bus trip during normal commute periods. Amtrak Coast Starlight trains and motor coach service to the Capitol Corridor, San Joaquin and Pacific Surfliner trains do not operate during normal northbound commute periods. As a consequence, residents of Monterey County who work in Santa Clara County and points north must use private vehicles to travel between home and work.

Highway 101 is currently the most viable route for these commuter trips. Caltrans divides Highway 101 from Salinas north through San Benito County into Segments 8 through 12. Table 1-1 presents the 1998 annual average daily traffic count (AADT), estimated 1998 peak-hour volume, and the projected 2020 AADT. Table 1-2 describes each highway segment and past and projected level of service (LOS), and Table 1-3 defines the LOS criteria. While improvements between Salinas and Santa Clara County are under consideration by Caltrans, projected traffic volume increases would result in unstable flow or jammed forced flow by 2020.

Table 1-1

Historic and Projected Traffic Volume between Salinas and Santa Clara County

Caltrans Hwy 101 Segment	1998 AADT ¹	1998 Estimated Peak Volume	2020 Projected AADT ¹	Volume Increase (Percent)
8	53,000	3,150	68,500	29
9	54,300	3,312	72,000	32
10	55,400	3,987	75,400	36
11	50,700	3,197	71,500	41
12A	53,000	3,816	77,700	46
12B	43,500	3,080	63,700	46
12C	46,700	3,279	73,000	56

Source: California Department of Transportation,
<http://www.dot.ca.gov/>.

¹Annual average daily traffic count.

Table 1-2

Description of Highway Segments between Salinas and Santa Clara County

Caltrans Hwy 101 Segment	Segment Boundaries	Description	Percent Truck Traffic	1998 LOS ¹	Projected 2020 LOS
8	North and South City Limits of Salinas	4-lane freeway	18	D	E
9	Salinas to southern Prunedale	4 lane highway w/ both freeway and expressway sections	18	E	F
10	Southern to northern Prunedale	4-lane urban expressway	15	F	F
11	Prunedale to San Benito Co. line	4-lane expressway	16	E	F
12A	San Benito Co. line to Route 156	4 lane highway w/ both freeway and expressway sections	15	F	F
12B	Rt. 156 to Rt. 129	4-lane freeway	16	D	F
12C	Rt. 129 to Santa Clara Co. line	4-lane freeway	16	E	F

Source: California Department of Transportation,
<http://www.dot.ca.gov/>.

¹See Table 1-3 for definition of Level of Service.

Table 1-3

Level of Service (LOS) Criteria

Level of Service	Description
A	Free flow conditions. Individual are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds; high maneuverability.
B	Stable flow, but the presence of others in the traffic stream begins to be noticeable. Freedom to select desired speeds but a slight decline in maneuverability.
C	Stable flow, but users become affected considerably by interactions of others in the traffic stream. Selection of speed is affected by the presence of others; lowered maneuverability.
D	High density but stable flow. Speed and freedom to maneuver are severely restricted.
E	Unstable flow. Operating conditions are at or near capacity. All speeds are reduced to a low, relatively uniform value. Queues begin to form and maneuverability is extremely difficult.
F	Jammed forced flow conditions.

Source: Highway Capacity Manual.

1.3 USES OF THIS DOCUMENT

This Draft Environmental Assessment/Environmental Impact Report (EA/EIR) has been prepared in accordance with U.S. Federal (under NEPA) and State of California (under CEQA) laws and regulations designed to evaluate and minimize impacts of proposed projects.¹ This document will be used by federal, state, regional, and local agencies to assess the environmental impacts of the project on resources under their jurisdiction and to make decisions regarding the project. *Note: This EIR is part of a joint NEPA/CEQA document (EA/EIR), but is only being circulated at this time for CEQA review. There are some sections and/or terminology used in this document that are included for NEPA purposes, but have not been removed for this circulation. These instances do not affect the analysis under CEQA.*

1.4 PERMITS AND APPROVALS

The following public agencies may be required to approve the project.

- **California State Transportation Commission**

The Commission is responsible for programming and allocating funds for the construction of highway, passenger rail and transit improvements throughout California. The Commission also advises and assists the Secretary of Business, Transportation and Housing Agency and the Legislature in formulating and evaluating state policies and plans for California's transportation programs. The Commission is an active participant in the initiation and development of State and Federal legislation that seeks to secure financial stability for the State's transportation needs.

Supplementary funding requests for the project, if needed, would require approval of the California Transportation Commission.

- **California Coastal Commission**

Commission jurisdiction in the coastal zone (which is specifically mapped) is broad. It applies to all private and public entities and covers virtually all development activities, including transportation. These policies constitute the statutory standards applied to planning and regulatory decisions pursuant to the Coastal Act. California's coastal management program is carried out through a partnership with the County of Monterey. The California Coastal Commission would be required to act on an application by TAMC for development within the

¹National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) implementing regulations (Part 40 *Code of Federal Regulations* [CFR] Section 1500 *et. seq.*), and the Federal Railroad Administration (FRA) *Procedures for Considering Environmental Impacts* (revised May 26, 1999). California Environmental Quality Act (CEQA; Public Resources Code 21000 *et seq.*), and California CEQA Guidelines California Code of Regulations, Title 14 Section 15000 *et seq.*

coastal zone, specifically the Locally Preferred Alternative Castroville Passenger Station at Site #2.

- **California Department of Transportation**

Aside from its responsibilities for the operation of the State highway system, the California Department of Transportation (Caltrans) takes part in the planning efforts for rail and transit projects. Caltrans District 5 has prepared the Preliminary Environmental Studies (PES) form for the project, and would implement its Encroachment Permit process if TAMC submits an application for possible encroachment of the present rail station project activities on State Route 156 or 183. The present Project Study Report (PSR) would be reviewed by Caltrans District 5 staff.

- **Association of Monterey Bay Area Governments (AMBAG)**

The Association of Monterey Bay Area Governments (AMBAG), the regional State Clearinghouse agency, is the designated Metropolitan Planning Organization (MPO) for Monterey, San Benito and Santa Cruz counties. AMBAG facilitates and coordinates the programming and budgeting of all transportation planning and projects to meet identified transportation needs while meeting collective air quality limitations set forth for transportation facilities. Member agencies such as TAMC recognize the voluntary role played by AMBAG in coordinating transportation planning.

AMBAG would act as the regional office of the State Clearinghouse and assume all duties under CEQA including processing of this Environmental Impact Report.

- **Monterey Bay Unified Air Pollution Control District (MBUAPCD)**

As required by the California Clean Air Act and the Federal Clean Air Act, the Monterey Bay Unified Air Pollution Control District is responsible for air monitoring, permitting, enforcement, long-range air quality planning, regulatory development, education and public information activities related to air pollution. The Monterey Bay Unified Air Pollution Control District is the permitting authority to allow air emissions by the project, monitor compliance, and assess possible violations.

- **Peninsula Corridor Joint Powers Board**

The nine-member Peninsula Corridor Joint Powers Board (PCJPB), made up of representatives from the counties of San Francisco, San Mateo and Santa Clara is the governing board for the Caltrain service. The PCJPB was created on October 18, 1991 through a Joint Powers Agreement. This agreement stipulates the PCJPB membership and powers, specifies financial commitments for each member, and details other administrative procedures. The Joint Powers Agreement stipulates that the San Mateo County Transit District (SamTrans) would be the managing agency for Caltrain, overseeing the day-to-day management, planning and support services necessary to operate the service. The PCJPB has contracted with Amtrak

to provide the actual train operations and maintenance functions. TAMC would be required to negotiate track rights for the project from the Union Pacific Railroad or ask the PCJPB to do so on their behalf. In addition, the Board would oversee the administration of Caltrain service to the region.

- **Monterey County**

The County of Monterey would review the project and how it conforms to the general plan and zoning regulations, including the Local Coastal Program (LCP). The Monterey County Department of Planning and Building Inspection would receive the applications for the proposed rail passenger stations at Pajaro and Castroville. In addition, the Redevelopment Agency of Monterey County would be involved in the planning and approval of station development at Castroville and Pajaro. Planning staffs would provide land use, zoning, and environmental review information for these sites, including:

- zoning information for specific parcels;
- approval of plot plans for minor building permit applications;
- receipt of applications for Coastal Permits, Variances, Use Permits, Subdivision Maps, Certificates of Compliance, Lot Line Adjustments, and other similar applications;
- receipt of environmental review applications;
- provision of letters to confirm zoning or subdivision information; and
- local coastal program update.

- **City of Salinas**

The City of Salinas would review the project and how it conforms to its general plan and zoning regulations. Three of the City's departments play key roles in coordinating and implementing this review process.

- The Community Development Department oversees the development of private land within the City of Salinas. This oversight includes the preparation and administration of the City's General Plan and specific plans relating to specific geographic areas within Salinas.
- The Department of Development and Engineering Services provides services through four divisions: Administration, Engineering Project Management, Development and Traffic Engineering and Public Services Maintenance Operations. Engineering Project Management provides engineering and project management services for the planning, design and construction of public facilities. Water conservation, contract administration and construction inspection are also areas of responsibility of the division. Development and Traffic Engineering is responsible for review of development plans and proposals to ensure responsible growth within the City including traffic and transportation issues and public infrastructure. Engineering services are provided to assure the safe and efficient movement of people and goods

throughout the community. Public Services Maintenance Operations supplies the technology and resources to maintain the public infrastructure. Activities include building and facility maintenance: street, curb/gutter, and sidewalk repairs: maintenance of traffic signal, street signs and legends: street sweeping and maintenance of sewers and graffiti abatement. This operation also provides the City's emergency response during disasters and local emergencies.

- Salinas Redevelopment Agency (SRA). The SRA, in conjunction with the Salinas City Council, has established two redevelopment project areas to address conditions of blight, as evidenced by high vacancy rates in buildings, deteriorated infrastructure, and other signs of deterioration and blight. In its role as the Redevelopment Agency, the Council has adopted redevelopment plans for the Central City Project Area (1974) and the Sunset Avenue Project Area (1987), which allows for a portion of property taxes to be reinvested within those areas to implement the plans and to combat blighted conditions. The Salinas ITC Expansion site is part of the Central City Project Area. The Salinas RDA purchased the Salinas Amtrak Station and surrounding property and, with federal and state transportation grant funds, has transformed the historic depot into an attractive transportation center.

The Salinas Planning Department and the Salinas RDA would each receive the applications for the proposed rail passenger stations at Salinas ITC and Layover sites. Staff from these two agencies would also provide land use, zoning, and environmental review information for these sites, and make recommendations to the Salinas Design Review Board on proposed structures.

1.5 REFERENCES

Parsons, 2005. *Project Study Report for the Commuter Rail Extension in Monterey County*. Prepared for Transportation Agency for Monterey County.

2.0 PROJECT DESCRIPTION

2.1 OVERVIEW

Project scoping activities for an extension of Caltrain to Monterey County have been ongoing since 1996. Between June 1996 and June 1998, the City of Salinas sponsored investigations of development options for a Salinas Intermodal Transportation Center (ITC) to be developed at the site of the existing Amtrak Station. Phase 1 of the transportation center consisting of bus layover bays, surface parking, site landscaping and lighting, was subsequently constructed and placed into operation in 1999.

In 1997, the City of Watsonville prepared a Draft Pajaro Valley Station PSR in cooperation with Monterey County, TAMC, and the Santa Cruz County Regional Transportation Commission. While not finalized, the draft PSR identified a potential site location and set of program requirements for this station.

From 1998 to 2000, these program requirements and opportunities for adjacent site development were further refined and explored by a Monterey County – sponsored Pajaro Railyards Area Feasibility Study. This study, as well as the draft PSR, sited the Pajaro Valley¹ Station (Pajaro/Watsonville) adjacent to the former Southern Pacific Passenger Depot, accessed from Salinas Road.

In 2000, TAMC sponsored the preparation of the Extension of Caltrain Commuter Service to Monterey County Business Plan. The business plan considered, but did not thoroughly evaluate alternative sites for stations at Pajaro and Castroville and a layover yard in Salinas. Following the completion of the business plan, a Pajaro Valley Station Working Committee of public agency staff met regularly during 2001 to discuss site location alternatives and program requirements.

The proposed project consists of five elements:

1. commuter rail station platform construction at Pajaro;
2. commuter rail station platform construction at Castroville;
3. renovations/expansions of an existing passenger rail station and construction of a new parking facility at Salinas;
4. construction of a commuter rail layover facility at Salinas; and
5. commuter train service and operations.

Conceptual plans of the proposed station improvements are included in Appendix B.

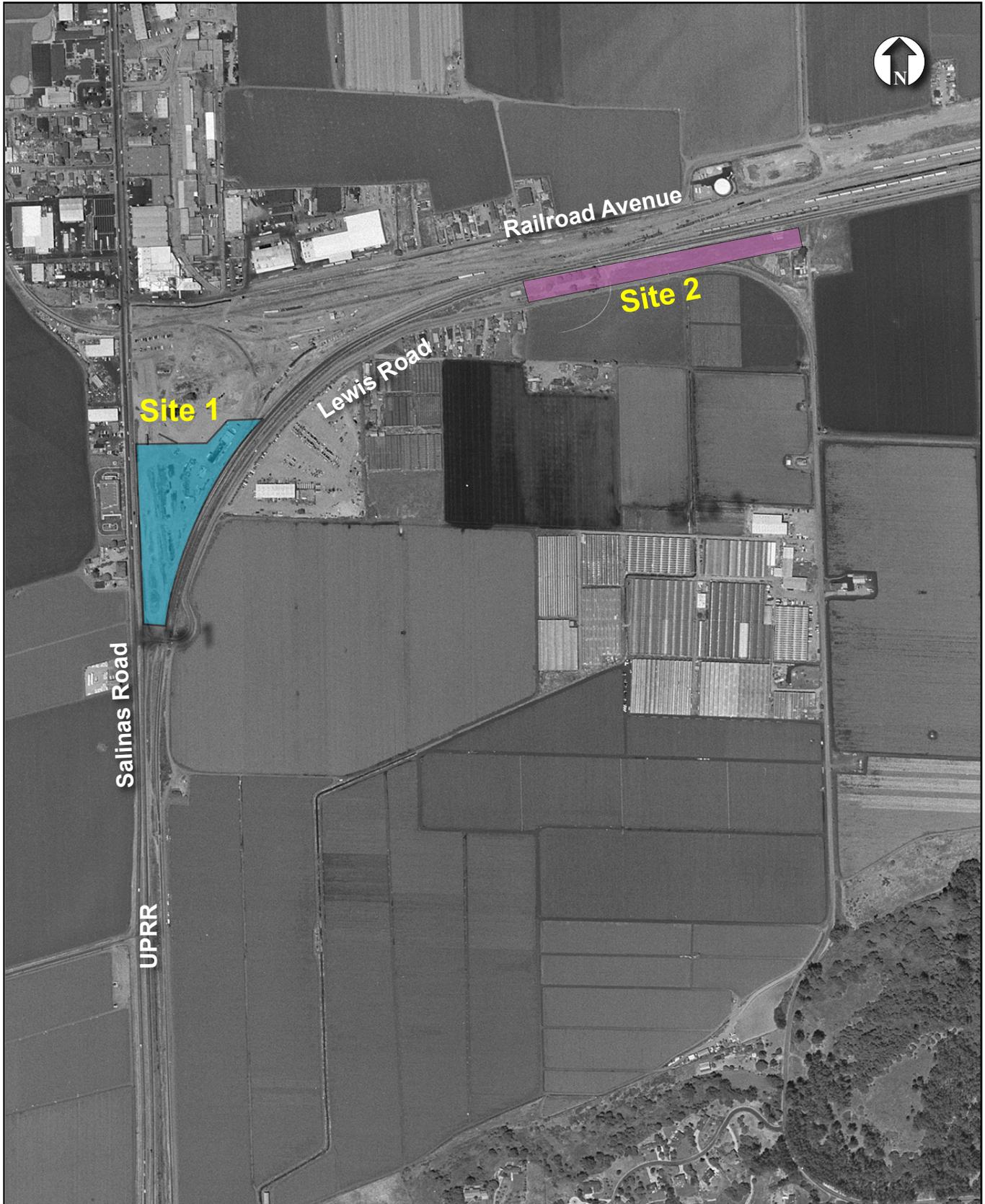
Improvements to the UPRR Coast main line between Gilroy and Salinas and institutional arrangements required for construction and operation of commuter rail service between Gilroy and Salinas, although related, are not included as a part of this Draft EA/EIR, as they are exempt under CEQA and eligible for a Programmatic Categorical Exclusion under NEPA, as explained in Section 2.4.

¹ Pajaro Valley Station is also known as Watsonville Junction.

2.1.1 Pajaro Passenger Station at Site #1

Located at the site of Watsonville Junction, the proposed Pajaro Passenger Station site would be on the nearly-level floodplain of the Pajaro River. Figure 2-1 shows the site location for the proposed Pajaro station. The site is within the unincorporated community of Pajaro located in Monterey County within a redevelopment project area just east of the Pajaro River and the Santa Cruz County line. The City of Watsonville is just northwest of the site and across the river. The site is bordered by Salinas Road on the west, Lewis Road on the south, and Railroad Avenue to the north in a light industrial land use area. The station would be located on the west side of the railroad tracks (between the tracks and Salinas Road). Parking would accommodate up to 416 spaces and includes a bus turnout area. The existing rail station building will be demolished and a new community center building constructed in its place by others. Adjacent to the station area, north of the station site, Monterey County Redevelopment Agency has proposed industrial/commercial development, with additional parking. Improvements to Salinas Road and Railroad Avenue would also be implemented for traffic circulation (discussed in more detail in Section 3.14 of this Draft EIR). The proposed Pajaro passenger facilities would include:

- (1) Construction of new rail passenger loading platform (700 feet by 20 feet)
- (2) Demolition and removal of the existing Pajaro Railroad station building.
- (3) Intertrack fencing
- (4) Platform shelters, lighting, furniture and fixtures, ticket vending machines, information displays and landscaping
- (5) Bus, shuttle, and van loading/unloading berths, shelters, information displays
- (6) Parking, bicycle facilities, sidewalks, and circulation roadways
- (7) Traffic signalization, signing, and striping
- (8) Construction/relocation of station track, turnouts, track removals, and railroad signaling, as may be required
- (9) Modification of railroad grade crossing equipment
- (10) Site drainage, lighting, and landscaping
- (11) Access to the station location via the Santa Cruz branch rail line
- (12) ROW acquisition and roadway improvements



Pajaro Site Location

PARSONS

Figure 2-1

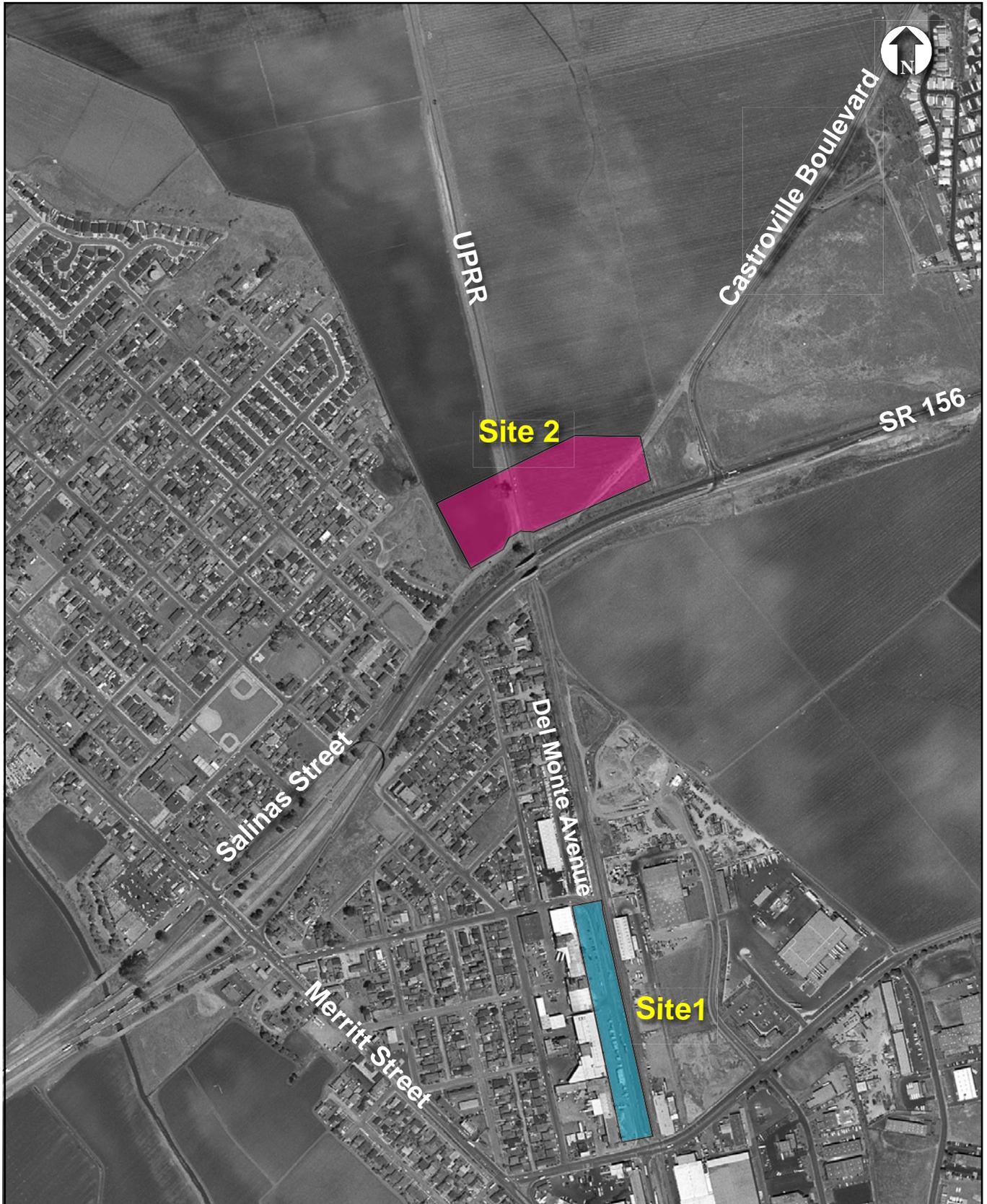
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2.1.2 Castroville Passenger Station at Site #2

The Locally Preferred Alternative Castroville Passenger Station at Site #2 is at the edge of an agricultural swale that lies just north of the State Route 156 overcrossing of the UPRR main line on the east side of the unincorporated community of Castroville. Figure 2-2 shows the location of the Castroville Station Site #2. The station platform would be located on the west side of the railroad tracks, with parking lots constructed on both the east and west sides of the tracks. The east side parking lot would serve mainly residents living on the east side of the tracks, and commuters arriving from the Prunedale area and Monterey Peninsula. The parking lot on the west side of the tracks would mainly serve residents living adjacent to the station on the west side of the tracks. East side residents will access the station from Castroville Boulevard. Caltrain patrons living on the Monterey Peninsula will travel eastbound on SR 156 then northbound on Castroville Boulevard. To return, east side station users will travel southbound on Castroville Boulevard and then westbound on SR 156. A pedestrian/bicycle crossing under the railroad tracks would connect the east side parking lot to the platform on the west side. The number of parking spaces on the east side would be between 117 and 238 spaces (depending on the configuration selected), and between 60 and 133 spaces on the west side. Agricultural land makes up most of the site and all the lands to the north, east and west. The site is bordered on the south by the State Route 156 transportation corridor and the stubs of Collins and Benson Roads. The proposed Castroville passenger station would include:

- (1) Rail passenger loading platform (700 feet by 20 feet) on the west side of the railroad tracks.
- (2) Intertrack fencing
- (3) Platform shelters, lighting, furniture and fixtures, ticket vending machines, information displays and landscaping
- (4) Pedestrian/bicycle access grade separation of UPRR track(s)
- (5) Bus, shuttle, and van loading/unloading berths, shelters, information displays
- (6) Parking, bicycle facilities, sidewalks, and circulation roadways.
- (7) Traffic signing and striping
- (8) Construction/relocation of station track, turnouts, track removals, and railroad signaling, as may be required
- (9) Site drainage, lighting, and landscaping
- (10) Access provisions to the station location via the Monterey branch rail line
- (11) ROW acquisition and roadway improvements.

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Castroville Site Location

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Figure 2-2

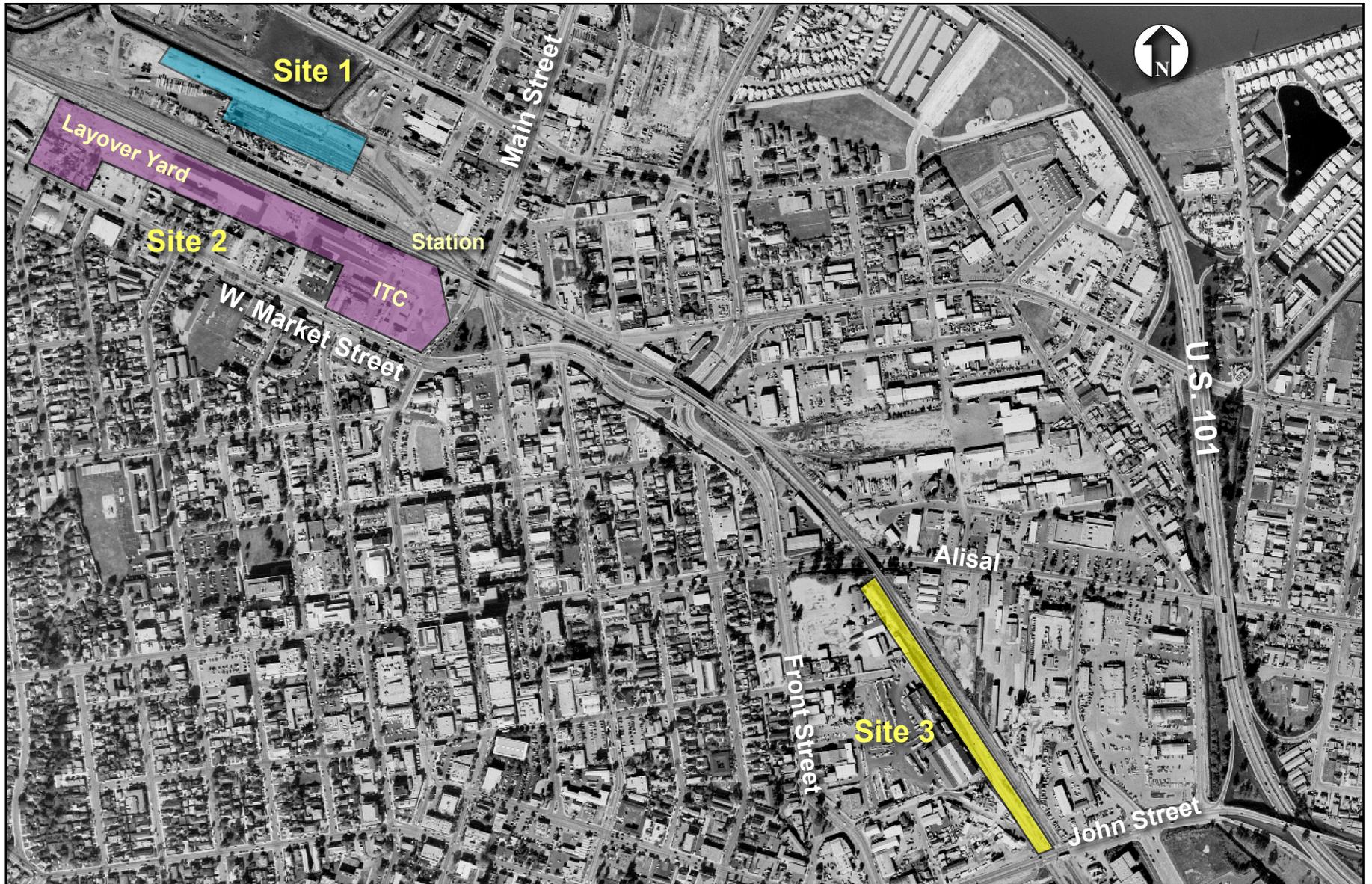
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2.1.3 Salinas Layover Yard Facility at Site #2 and Intermodal Transportation Center (Configuration 17 or Configuration 18)

The facilities proposed at Salinas would be clustered in the vicinity of the existing AMTRAK station, now known as the Salinas ITC and Layover Yard, as shown in Figure 2-3. This area is entirely urbanized and is within the limits of the City of Salinas. The Salinas ITC and Layover Yard facilities would include:

- (1) A parking structure adjacent to the station (Configuration 17) or a surface parking area with three parking lots (Configuration 18)
- (2) Bicycle lockers and bicycle racks
- (3) Reconstruction and expansion of the passenger loading platform (Configuration 17) or the addition of a second platform (Configuration 18)
- (4) Platform shelters, canopies, lighting, furniture and fixtures, ticket vending machines, information displays and landscaping
- (5) Modification and/or addition of site access and circulation roadways
- (6) Traffic signalization, signing, and striping
- (7) Construction of a Monterey-Salinas Transit (MST) bus transit center with passenger waiting and operations support facilities
- (8) Construction/relocation of station track, turnouts, track removals, and railroad signaling, as may be required
- (9) Construction of intercity bus loading berths and renovation of a freight rail building
- (10) Construction of Caltrain train crew base and maintenance buildings
- (11) Site drainage, lighting, and landscaping
- (12) Building demolition at parking lot sites.
- (13) ROW acquisition and roadway improvements

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Salinas Site Location

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2.2 ALTERNATIVES

2.2.1 No-Build (No-Project) Alternative

In the No-Build (No-Project) alternative, Caltrain service would not extend south from Gilroy to Pajaro (Watsonville Junction), Castroville, and Salinas. U.S. Highway 101 would continue to be the most viable commuter route.

2.2.2 Project Alternatives

2.2.2.1 Locally Preferred Alternative (LPA)

Pajaro Passenger Station at Site #1 (Watsonville Junction)

Two possible sites were identified for the Pajaro Valley Station and were in close proximity to the UPRR Watsonville Junction. Based on the lowered cost differential between Site #1 and Site #2, the opportunity to expand the parking supply at Site #1 in the future, UPRR's preference for developing "coastside" station platforms, Site #1's direct interface with the Santa Cruz branch line, and the greater accessibility of Site #1 to Salinas Road and the Pajaro community, Site #1 was selected as the LPA.

Pajaro Passenger Station Site #1 is adjacent to Salinas Road and would feature a separate station track west of the mainline track. One key advantage of this site is its direct interface with the Santa Cruz branch line track, which has been the subject of considerable study insofar as establishing passenger rail service.

The conceptual site plans were reviewed with UPRR representatives. These representatives stated that UPRR has adopted a business strategy that is intended to speed freight service over their entire system. A UPRR policy has been implemented to avoid potential conflicts with passenger rail operations wherever possible. UPRR is, therefore, stipulating that new stations be located off the main line track(s), on a separate station track(s). UPRR representatives also stated a strong preference for locating passenger rail station platforms along the Pacific Coast side of the Coast Main Line track.

Castroville Passenger Station at Site #2

Two sites were identified for the Castroville Station. Site #1 is south of State Route 156 and runs along Del Monte Avenue and Site #2 is located immediately north of State Route 156. Site #2 was selected as the LPA.

Downtown Castroville and the principal concentration of residential development lie to the west of Site #2. Site #2 affords a large space to develop a passenger rail station and parking area. Parking supplies and site access roads could be developed on the Coast (west) side of the main line or on the east side of the tracks. Lands on both sides of the track are currently used for agricultural (artichoke) production. Construction of an access roadway would be required, as well as a pedestrian grade separation (crossing). Due to the supply of parking, access roadway construction and a grade-separated pedestrian crossing, development of a station on Site #2 is estimated to cost approximately twice that of Site #1. Concerns expressed during the preparation of the alternative conceptual design plans regarding farmland conversion of Site #2 have been resolved by Monterey County land use policy and consultation with California Coastal Commission staff.

Salinas Layover Yard Facility at Site #2

Three site areas were identified as possible locations for the Salinas Layover Yard Facility. Site #1 is located northeast of the main line track on property owned by UPRR and currently used for freight rail support operations. Site #2 lies southwest of the main line track and would be located immediately west of the existing Amtrak passenger depot. Site #3 lies approximately one mile to the southeast of the Amtrak Station, between Alisal Street and East John Street. At this location, the UPRR right-of-way is wider, and could accommodate a four-train-on-two-track “tandem” layover facility. These conceptual site plans were reviewed with UPRR real estate and operating representatives to collect input, as two of the three layover facility sites would affect UPRR right-of-way and/or main line track capacity. UPRR operational staff was not in favor of Sites #1 or #3 because of possible operations conflicts and these sites have been withdrawn from further consideration. Site #2 was selected as the LPA for the Salinas Layover Yard Facility.

In response to UPRR requirements, eleven conceptual site plans were developed for Site #2. These layover facility site plans were subsequently reviewed with UPRR operating representatives to collect the host railroad’s input. UPRR operational staff was not in favor of using the southwest main line track for shared Caltrain and Amtrak platform access at the Salinas Station, as reflected in earlier conceptual plans. They observed that the Amtrak Coast Starlight schedule adherence is highly variable, with trains frequently running behind schedule.

UPRR staff expressed concern that a late arrival of the last evening southbound Caltrain could further delay the Coast Starlight schedule, particularly if Caltrain needed to clear the same station track that was being shared with Amtrak. To avoid this potential conflict, use of the southwest main line track was eliminated from consideration, which left two potential site configurations.

All of the Site #2 options would require the acquisition of right-of-way owned by private, non-railroad entities. As the precise footprint of a layover facility on Site #2 would not be identified until right-of-way negotiations have advanced and a corresponding design option is refined, Site #2 is investigated in its entirety for potential environmental impacts.

Salinas Intermodal Transportation Center Expansion

The Salinas ITC expansion will provide an expanded parking supply to accommodate the addition of Caltrain service, a relocated and expanded transit center for MST local bus operations, an intercity bus terminal to accommodate Greyhound, Amtrak Thruway and Airporter bus operations, signalized access to the adjacent street network, improved pedestrian access to downtown Salinas, and associated transit passenger support facilities. To accommodate the expanded scope and magnitude of ITC functions, conceptual plans were iteratively developed and reviewed with local agency staff, community leaders, transit service operators, and affected property owners over an 18-month time period. Two configurations (Configuration 17 and Configuration 18) were selected to be investigated in their entirety for potential environmental impacts.

Configuration 17

Configuration 17 would be developed in two phases, Phase 1 and Phase 2. These phases are described below.

Phase 1 (Configuration 17a)

- Six intercity bus berths and a taxi waiting area would be installed at the west end of the site.
- Bike lockers and short-term parking spaces along a reconstructed island would also be provided in this area.
- A passenger drop-off area would be established in front of the station building that would be accessible to automobiles via a newly constructed entrance to the ITC.
- A center island MST transfer facility would wrap around the eastern corner of the site, providing for 13 vehicles.
- Lincoln Avenue would be extended into the ITC, with two lanes entering the site and two lanes exiting the site.
- Station Place and all existing businesses fronting the ITC would be eliminated to allow for the Lincoln Avenue extension.

- Two surface parking lots would be constructed on both sides of the Lincoln Avenue extension, which would contain a total of 300 parking spaces. This yields a net increase of 150 spaces.

Phase 2 (Configuration 17b)

- Phase 2 would construct a 4-level parking garage containing 700 spaces on three bays of the large surface lot. This design allows for a total parking supply of 700 spaces representing a net increase of approximately 550 parking spaces.
- The small surface lot as well as the first bay of the large surface lot could also be transformed into supportive land uses such as a transit oriented development or hotel.

Configuration 17 also proposes to remodel an existing unused freight building for intercity bus passenger and other transit support operations. The Salinas Southern Pacific Freight Depot is located along the northern boundary of the project area. This structure is considered eligible for inclusion in the National Register of Historic Places (NRHP) under Criterion A as part of the proposed federal undertaking because it is "...associated with events that have made a significant contribution to the broad patterns of our history."

The proposed project would require the adaptive reuse, remodel and reduction of the freight depot, a one-story, wood-framed, rectangular building, approximately 5,000 square feet in size. The freight depot is currently sited on a mixed commercial/industrial area with scattered buildings adjacent to the UPRR tracks in downtown Salinas.

Configuration 18

The principal difference between configuration 17 and configuration 18 is the parking arrangement. Configuration 17 would include the construction of a four-level parking structure (grade plus three elevated levels). Configuration 18, however, would rely exclusively on surface parking. Three surface parking lots would provide 663 spaces. Configuration 17 is a smaller footprint than Configuration 18. One lot in Configuration 17 would use essentially the same footprint as would be used for the four-level parking structure in Configuration 17. This lot would provide approximately 177 spaces. The second and third lots would be placed adjacent to the station between Vale Street and Palmetto Street. These two lots would provide approximately 486 additional parking spaces.

Configuration 18 would have better access due to two additional roadways that will supply access/egress to the parking area. Should additional parking be required in the future, Configuration 18 provides more opportunity to build a parking deck over the surface parking lots, as opposed to building additional floors on the parking structure.

2.2.3 Alternate Castroville Site Alternative

The Alternate Castroville Site Alternative has exactly the same site mix as the Locally Preferred Alternative (Pajaro Passenger Station at Site #1, Salinas Layover Yard Facility at Site #2, and Salinas ITC Expansion Configurations 17 or 18) with the exception of the inclusion of an alternate Castroville Passenger Station site. This alternative site is identified as Castroville Passenger Station at Site #1 (Del Monte Avenue).

Because Castroville Passenger Station at Site #2 has the potential for a significant adverse impact to agriculture, per CEQA regulations, an alternative site must be evaluated for the possibility of avoiding or lessening the identified potential significant adverse impact. Castroville Passenger Station at Site #1 was selected as the alternate site for environmental analysis.

Castroville Passenger Station Site #1 lies approximately one mile south of Castroville Site #2 and is adjacent to Del Monte Avenue south of State Route 156. This area is surrounded by industrial land uses. Castroville Site #1 would use the area formerly occupied by the Castroville Depot that serviced the Coast main line and the Monterey branch line. The depot was removed years ago and UPRR has recently removed the Monterey branch line turnout and track connection. TAMC and the State Department of Transportation Division of Rail are actively working to restore this track connection and upgrade the branch line for operation of local and/or intercity passenger rail or bus rapid transit service.

Site #1 has a straightforward conceptual design, as it would take advantage of an existing street (Del Monte Avenue) for all site parking access and circulation; however, adjacent industries use the roadway for parking truck trailers along the easterly curb. In addition to the parking supply, to be accessed from Del Monte Avenue, an adjacent parcel potentially could be acquired to expand the parking supply for this station. This adjacent parcel is currently fully utilized for “warehousing” agricultural processing, performing support operations, and housing supplies. In the event that passenger rail service is restored on the Monterey Branch line, the station layout would be reconfigured to accommodate branch line service.

2.3 ALTERNATIVES CONSIDERED AND WITHDRAWN

2.3.1 Pajaro Passenger Station at Site #2

Pajaro Passenger Station Site #2 runs along Lewis Road would be less complex than Site #1 from a station development perspective, as less track, turnout, and signaling work would be required. This conceptual design features a platform adjacent to one of the two main line tracks—similar to all Caltrain stations south of Tamien between San Jose and Gilroy. Future interface with potential passenger rail service on the Santa Cruz branch line would be more complex however, requiring several additional turnouts for a direct track connection or a pedestrian overcrossing linking two separate boarding platforms. Site #2 was strongly opposed by UPRR operations personnel and was not favored by

local residents, as access would be circuitous. It was thus withdrawn from further consideration.

2.3.2 Salinas Layover Yard Facility at Sites #1 and #3

Two site areas were initially identified for the Salinas Layover Yard Facility, both in close proximity to the end-of-the-line passenger rail station at Salinas. Later, a third potential site was identified, located approximately one mile southeast of the Amtrak Station at John Street.

Initially, two conceptual layouts were developed for Site #1, which is northeast of the main line track on property owned by UPRR and currently used for freight rail support operations. One conceptual layout would include an area once used for two tracks serving an agricultural produce elevator. This area is currently vacant and all tracks and buildings have been removed. A four-train-on-two-track “tandem” layover facility was conceptually designed. A second conceptual plan would include a lightly used six-track yard, once used for trailer-on-flatcar loading. This yard and adjacent ramp are no longer used for this purpose. A four-track layover facility was conceptually designed.

These conceptual site plans were reviewed with UPRR real estate and operating representatives to collect input, as both layover facility sites occupied UPRR right-of-way. UPRR operational staff were not in favor of either option for Site #1, contending that passenger train movements from station platform to layover track (and vice versa) would necessarily occupy and therefore tie up the mainline track, potentially posing freight capacity impacts. UPRR representatives suggested looking southwest of the mainline track at land parcels largely vacant and not owned by UPRR. They also suggested developing a separate station track for commuter rail and Amtrak passenger service, similar to the requirements posed for the Pajaro Valley and Castroville stations. Site #1 was thus withdrawn from further consideration.

In the event that right-of-way could not be acquired to construct the layover facility on Site #2 (LPA), a third site was investigated for feasibility. Site #3 lies approximately one mile to the southeast of the Amtrak Station, between Alisal Street and East John Street. At this location, the UPRR right-of-way is wider, and could accommodate a four-train-on-two-track tandem layover facility. Location of the layover facility at Site #3 would entail use of the southwest mainline track for access to the station platform and layover yard tracks. The adjacent passing track would need to be upgraded to main line status and condition for a distance of approximately 5,500 feet. New turnouts and upgraded signaling would also be required. UPRR freight operations would be impacted by the selection of Site #3 for the Caltrain layover facility; therefore, Site #3 was withdrawn from further consideration.

2.3.3 ITC Expansion Configurations 1–16

Eighteen site layouts were developed to explore options for accommodating MST and Greyhound bus operations along with an expanded supply of parking for Caltrain commuter needs. Options 1 through 16 were withdrawn from further consideration; six of the options explored by this investigation were intended to build upon the existing ITC investment, rather than pursuing a teardown and start over strategy, while the remaining would significantly alter the existing use of space.

Based on its earlier investigation of site assembly alternatives, the City of Salinas was able to furnish guidance regarding the feasibility of parcel acquisition and/or utilization. This guidance indicated that existing businesses fronting the Salinas ITC and Market Street should be retained to the extent possible. Vacant and/or underutilized lands should be considered for acquisition or lease. Parking supplies needed for commercial tenants and their customers should be retained. Future redevelopment of lands with low levels of improvement should be considered. A view corridor between the downtown, the Steinbeck Center and the ITC should be preserved if possible.

The City of Salinas recognized that access to and from an expanded ITC would require signalized traffic control at one of the facility's access points. In support of this project as well as other ongoing development initiatives, the City of Salinas contracted with Higgins Associates to examine traffic signal progression along Market Street and Monterey Street in downtown Salinas. This investigation considered the realignment of Lincoln Avenue to intersect with Station Place, and alternately the extension of Lincoln Avenue into the ITC on a new alignment. The intersection of Lincoln Avenue with West Market Street is currently signalized.

The alternatives withdrawn considered both options for signalization of at least one access and egress point to the expanded ITC. Options 1–3 assumed a realignment of Lincoln Avenue to intersect with Station Place, while Options 4–16 assume an extension of Lincoln Avenue into the ITC on a new alignment. Options 1–5, and 7–16 illustrate potential sites for a structured parking facility that would be sized to meet the anticipated requirement for the expanded ITC. Option 6 explores the feasibility of meeting the parking requirement with surface supplies (no structure) on the north side of the UPRR main line track and yard. Options 8-15 also explore the possibility of providing space for future development to occur while 7-10, 13, and 15-16 would set aside ground-floor retail space within the parking garage.

2.4 PROGRAMMATIC CATEGORICAL EXCLUSIONS UNDER NEPA

Portions of the project will require railway improvements that are exempt from CEQA but require a NEPA review. Therefore, a Programmatic Categorical Exclusion will be prepared separately for these improvements, and will not be analyzed as part of this EA/EIR.

The project will include railway improvements to the existing UPRR Coast Main Line, passing tracks, yard tracks, and branch line connections to allow Caltrain to extend service from Gilroy in Santa Clara County, through San Benito County to Salinas in Monterey County. All railway improvements will occur within previously disturbed areas of the Union Pacific Railroad right-of-way. The project will include the following specific and general elements. Milepost (MP) locations are approximate.

Gilroy

- Install new second main track from 10th Street to East Luchessa Avenue (MP 77.65 to MP 78.52).
- 10th Street (MP 77.70). Relocate existing or install new warning devices at crossing No. 755180C to accommodate three tracks. Install concrete grade crossing panels, rebuild track, replace ballast, and repave crossing for new track.
- East Luchessa Avenue (MP 78.40). Relocate existing or install new warning devices at crossing No. 755181J to accommodate two tracks. Install concrete grade crossing panels, rebuild track, replace ballast and repave crossing for new track.
- South (east) of East Luchessa Avenue (MP 78.52). Install #20 power turnout.

Pajaro

- Logan (west end of double track at MP 89.63). Replace existing spring switch with #20 power turnout.
- Watsonville Yard (MP 96.67). Replace existing track crossover with left hand #15 power crossover.
- Watsonville Yard (MP 96.69). Install right hand #11 power crossover.
- Watsonville Yard (MP 96.82 to MP 97.33). Shift main track No. 2.
- Watsonville Yard (MP 96.82 to MP 97.00). Shift yard lead track.
- Watsonville Yard (east of Salinas Road). Install #11 power turnout on Santa Cruz Branch line.
- Watsonville Yard (Lewis Road MP 97.19 to vicinity MP 96). Remove yard track.
- Watsonville Yard (MP 97.00 and MP 97.02). Install left hand #11 turnouts.
- Watsonville Yard (MP 97.19). Remove existing turnout.

- Lewis Road (MP 97.20). Relocate existing or install new warning devices at crossing #752354V. Install concrete grade crossing panels, rebuild track, replace ballast and repave crossing for shifted main track No. 2.
- South (east) of Lewis Road (MP 97.40). Replace existing spring switch with #20 power turnout.

Castroville

- North of SR 156 (MP 106.27). Install #15 power turnout.
- Construct station track from MP 106.27 to MP 106.76.
- South of SR 156 (MP 106.70). Install #11 turnout.
- South of SR 156 (MP 106.70 to MP 106.85). Restore existing siding track.
- South of SR 156 (MP 106.76). Install #15 power turnout.
- North of SR 156 to South of SR 156 (MP 106.27 to MP 106.87). Shift main line track easterly 3 feet 8 inches or less.

Salinas

- At Vale Street (MP 114.70). Install #15 power crossover.
- New Street to Main Street (MP 114.58 to MP 115.07). Resurface or rebuild main line track, replace ballast.

Coast Main Line -- Gilroy to Salinas

- Resurface and/or rebuild track, replace ballast, replace ties, repair or upgrade drainage structures, upgrade or install train signals and controllers at locations to be determined.

2.5 REFERENCES

Federal Highway Administration, U.S. Department of Transportation, 2003. Safe Accountable Flexible Efficient Transportation Equity Act of 2003; Reauthorization of TEA-21. www.fhwa.dot.gov/reauthorization/safetea.htm

Transportation Agency for Monterey County (TAMC), 2005a. TAMC Rail Policy Committee, Monterey County Fixed Guideway Project Budget Memorandum. May 2.

TAMC, 2005b. *Final Regional Transportation Plan*.

3.0 AFFECTED ENVIRONMENT, CONSEQUENCES, AND MITIGATION MEASURES

This chapter consists of 14 sections, each of which presents the analysis of the impacts of the project and project alternatives within an environmental discipline. Each section includes the following information.

- **Introduction.** A description of the section and overview of potential impacts evaluated.
- **Environmental Setting.** A description of the existing conditions for each environmental discipline. The setting acts as a baseline to which the analysis compares to the effects of the alternatives and project components. Pursuant to Section 15125 of the state CEQA Guidelines, the environmental settings have been prepared at a level of detail necessary to provide an understanding of the significant effects of the proposed project and its alternatives.
- **Regulatory Setting.** A description of the various policies and regulations established by agencies with jurisdiction over the project.
- **Evaluation Criteria with Points of Significance.** An identification of the relevant state, federal, and local agencies with environmental standards (e.g., water quality standards, air quality standards, zoning provisions, etc.) and/or other criteria by which a change in the environment can be assessed. The specific evaluation criteria used to determine the impact(s) is presented along with the measurements used to determine whether an impact is “significant” and the point at which the impact becomes significant. The source and justification for each criterion is identified.
- **Methodology.** A discussion of the methodology for the basis of the impact analysis.
- **Environmental Consequences (Impacts) and Recommended Mitigation Measures.** A presentation of the results of the environmental analysis for each discipline, including the identification of impacts, the determination regarding significance, the description of mitigation measures proposed to avoid or lessen impacts, and whether mitigation will reduce the effects to less than significant. The impact analyses have been prepared to comply with Section 15143 of the CEQA Guidelines that states that the “significant effects should be discussed with emphasis in proportion to their severity and probability of occurrence.” Where impacts cannot be reduced to a level that is less than significant, the impact is identified as significant and unavoidable.
- **Cumulative Impacts.** Cumulative impacts are discussed for each topic section when the project’s incremental effect is “cumulatively considerable,” as defined in section 15065(c) of the CEQA Guidelines. Cumulatively considerable means that the incremental affect of the project are considerable when viewed in

connection with the effects of past projects, the effects of other current projects, and the effect of probable future projects. If cumulative impacts are found to be significant, mitigation measures are proposed to require the project applicant to avoid or minimize that portion of the cumulative impact that can be attributed to the project.

- **References.** Each section ends with a list of references or consultation of sources of information.

3.1 VISUAL RESOURCES

3.1.1 INTRODUCTION AND SUMMARY OF IMPACTS

This section addresses potential aesthetic impacts that would result from development of the proposed project. The potential visual effects of the proposed project are evaluated from the perspective of both public and private views, and consider impacts to scenic vistas, scenic corridors visual resources of the natural and built environment, and glare from the introduction of exterior lighting. A summary of the visual resources impacts and mitigation measures is presented below. Full analysis is included in Section 3.1.6.

<i>IMPACT</i>	<i>SIGNIFICANCE BEFORE MITIGATION</i>	<i>MITIGATION MEASURES</i>	<i>SIGNIFICANCE AFTER MITIGATION</i>
VR-1: Will the Project have a substantial effect on a scenic vista?	Less than significant	No mitigation necessary.	Less than significant
VR-2: Will the Project substantially damage scenic resources along a designated scenic highway?	No impact-Alternate Castroville Site; Potentially significant - LPA	No mitigation necessary. VR-2: Conduct a visual impact analysis on Highway 156 at Castroville Site No. 2.	No impact Less than significant
VR-3: Will the Project substantially degrade the existing visual character or quality of the site and its surroundings?	Significant	VR-3a: Incorporation of design standards to preserve historic visual character of the area. VR-3b: Design parking to be compatible with surrounding character and setting.	Less than significant
VR-4: Will the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Potentially significant	VR-4: Prepare an Exterior Lighting Design, in accordance with Monterey County General Plan Policy ER-9.8, along with implementation of Mitigation Measure VR-2, conduct a visual impact analysis of affected residential properties.	Less than significant
VR-C1: Will the project have significant cumulative aesthetic impacts?	Potentially significant	Implement Mitigation Measures VR-3a and VR-3b, as shown above.	Less than significant.

3.1.2 ENVIRONMENTAL SETTING

Pajaro Passenger Station Site (Watsonville Junction)

The Pajaro station site is a developed parcel located along the UPRR corridor in a primarily agricultural setting. There are no trees on the project site. The site has been graded, and supports only weedy growth in places, as shown in Figure 3.1-1. The site was previously used as a railroad storage yard and train depot (Parikh Consultants 2002a), and small piles of wood and other debris were observed on site (Parsons 2005). The existing station is currently in use as a railroad storage yard and for limited office use.

The Pajaro station site is located along the east side of Salinas Road, in between Salinas Road and the UPRR. The site includes the former Pajaro Passenger Station (which is currently used by UPRR for yard operations) and a small toolshed and is bounded by industrial and agricultural land. The topography of the site and larger area is generally flat. The view to the north of the site (Figure 3.1-1) shows the site as undeveloped, with the former Smuckers processing plant in the distance. Figure 3.1-2 shows the view from the site to the west, which includes a two-story residential building and an agricultural field with row crops; Salinas Road is in the foreground. In Figure 3.1-3, the view to the south of the site is undeveloped railroad right-of-way and agricultural fields. Low, rolling hills can be seen in the distance. The view to the east (Figure 3.1-4) is undeveloped land which may have been in agricultural use at one time. An industrial building can be seen next to the field and the Gabilan Range can be seen in the background.

Visual Resources, Viewsheds, and Viewer Groups

In the project area, Salinas Road is a four-lane arterial roadway that supports commercial, residential, and industrial/manufacturing uses. North of the project site, industrial/manufacturing uses are located along the UPRR corridor and along Salinas Road. UPRR support structures and equipment storage areas are located within the boundary of the project site. A building that formerly served as the Southern Pacific Station is located on the proposed station location. The present stucco one-story Moderne style passenger station was built in 1942 as replacement of the former Pajaro passenger station. The building is used by UPRR yard personnel and in disrepair, with the majority of the fenestration boarded. The passenger station is currently not in public service.

Only freight operations have been continuous since the opening of the railroad line in July of 1871. Along with the passenger station, a small, adjunct metal Railroad Express Agency (REA) operations building and weathered wood framed Southern Pacific “smoke” house (also known as the tool building), located to the south and to the north of the station building respectively, are the only structures remaining on the former Southern Pacific Rail Road site. Commercial and a few residential properties are located along Salinas Road in the project area; however, most of the surrounding land use to the east, south, and west is agricultural.

**Figure 3.1-1. Pajaro Passenger Station Site #1
View to North of Site**



Source: Parsons June 3, 2005

**Figure 3.1-2. Pajaro Passenger Station Site #1
View to West of Site**



Source: Parsons June 3, 2005

**Figure 3.1-3. Pajaro Passenger Station Site #1
View to South of Site**



Source: Parsons June 3, 2005

**Figure 3.1-4. Pajaro Passenger Station Site #1
View to East of Site**



Source: Parsons June 3, 2005

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Viewer groups in the project area with views of the Pajaro station Site #1 include motorists traveling along Salinas and Lewis Roads, residents of nearby single- and multi-family properties, and patrons of commercial and industrial facilities along Salinas Road. Residents of nearby single- and multi-family properties represent a sensitive viewer group. The residential properties in the site vicinity include a single-family house surrounded by agricultural land that is located west of the project site (shown in Figure 3.1-2); and two other residential properties located along the west side of Salinas Road.

Castroville Station

Castroville Site #1: Del Monte Avenue

Castroville Station Site #1 is located adjacent to Del Monte Avenue, south of State Highway 156, and is currently fully developed. There is no vegetation, and most of the site is paved or gravel-lain. The Castroville Station Site #1 is void of scenic resources. The topography of the site and larger area is generally flat, and there are no distant views of hills or other scenic resources. Figures 3.1-5, 3.1-6, 3.1.7, and 3.1-8 show photographs of the existing site conditions.

Visual Resources, Viewsheds, and Viewer Groups

This area is surrounded by industrial land uses and was the historical location of the Castroville Depot. Castroville Station Site #1 would occupy the area formerly occupied by the Castroville Depot, alongside the existing UPRR tracks. This site would use Del Monte Avenue for all parking and traffic circulation. In the event that passenger rail service was instituted on the Monterey Branch line to Castroville, adjacent warehouse land would be purchased to provide parking capacity.

Viewer groups in the area include regular motorists who commute to work within the vicinity. Del Monte Avenue is not a roadway heavily traveled by commuter or visitor traffic, but likely experiences high volumes of truck traffic. There are no sensitive viewer groups in the area.

Castroville Station Site #2: North of State Route 156

Castroville Station Site #2 is located in a predominantly agricultural setting north of State Route 156, near the intersection of Castroville Boulevard and State Route 156. This site is active agricultural land, which the UPRR traverses. The Castroville Station Site #2 comprises part of the western periphery of a large, wide stretch of scenic, relatively flat agricultural land that continues east and northeast. State Highway 156, a designated State Scenic Highway bounds this area and the subject site to the south. State Highway 156 is elevated in the project area, and blocks views further south from the site. The site and surrounding area

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**Figure 3.1-5. Castroville Passenger Station Site #1
View of Site Looking Southeast**



Source: Parsons June 3, 2005

**Figure 3.1-6. Castroville Passenger Station Site #1
View to West of Site**



Source: Parsons June 3, 2005

**Figure 3.1-7. Castroville Passenger Station Site #1
View from Site Looking South**



Source: Parsons June 3, 2005

**Figure 3.1-8. Castroville Passenger Station Site #1
View from Site Looking Southwest**



Source: Parsons June 3, 2005

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are characterized by generally flat topography. There are no hills or other natural features visible on the horizon from the subject site. Photographs of the Castroville Station Site #2 are shown in Figures 3.1-9, 3.1-10, 3.1-11, and 3.1-12.

Visual Resources, Viewsheds, and Viewer Groups

Agricultural land borders the site to the north and west. Approximately 200 feet to 1/3 mile away beyond the agricultural land to the west, there is a residential community comprised of single family homes and some multi-family properties. Collins Road and Benson Road, collector streets that front State Route 156, border the site to the southeast. Benson Road dead ends west of the UPRR. Collins Road, an existing collector street that is partially closed to vehicles, traverses the site south from Castroville Boulevard, and dead ends east of the UPRR. Agricultural land continues south of State Route 156. Collins Road merges into Castroville Boulevard, a two-lane arterial, which continues east from the site. Agricultural land continues east of Castroville Boulevard.

There are scenic views of agricultural land to the north and east from the site that continue into the far distance. The residential community and dense development further northwest comprise views west and northwest from the site. Stacks from the Moss Landing Power Plant can be seen in the far horizon to the northwest.

Viewer groups in the project area with views of the Castroville Station Site #2 include motorists traveling along State Highway 156, Castroville Boulevard, and other adjacent roadways such as Axtell and Davis Streets within the nearby residential community. Only occasional motorists would travel along Collins and Benson Roads, as these are not through roads. Castroville Boulevard and State Highway 156 experience high traffic volumes, and are regularly traveled by commuter motorists. Additionally, State Highway 156, which is a State Scenic Highway, is traveled heavily by tourists (Monterey County, 1982). Motorists traveling along State Highway 156 are considered a sensitive viewer group, due to the status of State Highway 156 as a State Scenic Highway.

Salinas Intermodal Transportation Center and Layover Facility #2

The proposed Configurations #17 and #18 for the Salinas Intermodal Transportation Center and Layover Facility would be located on a site west of the intersection of Main Street/Salinas Avenue and Market Street, on land occupied by the existing Salinas Amtrak station and adjacent industrial and commercial properties. The Amtrak station is a single-story structure that faces south, and is set back one short block north of Market Street. The historic Southern Pacific passenger station, currently the Salinas Amtrak station, was built in 1942 as a replacement of the earlier Salinas (circa 1901) colonnade-style passenger station.

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**Figure 3.1-9. Castroville Passenger
Station Site #2
View of Site from Collins Road**



Source: Parsons June 3, 2005

**Figure 3.1-10. Castroville Passenger
Station Site #2
View from Collins Road Looking West
at Site**



Source: Parsons June 3, 2005

**Figure 3.1-11. Castroville Passenger
Station Site #2
View South of Highway 156 from Collins
Road**



Source: Parsons June 3, 2005

**Figure 3.1-12. Castroville Passenger
Station Site #2
View to East**



Source: Parsons June 3, 2005

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The Amtrak station is shown in Figure 3.1-13. The historic freight depot building is the original Southern Pacific Standard-Design Freight House (station), built in 1872 and is located adjacent to the Amtrak station to the west. The freight depot is a board and batten structure, which exhibits superficial modifications to the roof, west and north elevation and surface cladding. The freight station is currently not in service and the majority of the windows are boarded. The freight depot is shown in Figure 3.1-14. A paved, surface parking lot and industrial building are located further west, fronting the existing train tracks.

Located to the east of the Amtrak station are a historic Southern Pacific locomotive steam engine and wood caboose sited parallel to the tracks, and a single-story warehouse structure that was originally the Southern Pacific Railway Express Agency (REA) building, built in 1919, which has been appropriately renovated. The historic caboose is shown in Figure 3.1-15. The historic Harvey-Baker House, a Victorian-style residence that was the original home of the first Mayor of Salinas, and its ancillary building, were built in 1886 and is located further east, in the northeast corner of the site.

The Harvey-Baker House was relocated from its original location to this site around 2000 in an effort by the City of Salinas to centralize tourist destinations near the Amtrak station. Another tourist destination, The National Steinbeck Center, is located southeast of the ITC site, on the southeast corner of Salinas and Market Streets. The National Steinbeck Center draws tourists from around the globe, and at the same time is a focal point for activities in education, history and the arts within the City.

An on-site paved, surface parking lot stretches from in front of the Harvey-Baker House to the caboose, Amtrak station, and freight depot. Commercial, office properties and paved surface parking located south/southwest and southeast of the Amtrak station comprise the remainder of the site (see Figures 3.1-16 and 3.1-17a and b). A short block of early 1900s, one-story, storefront commercial buildings (El Aguila Bakery, Market and Warehouse) flank the north side of Market Street between Station Place and the proposed Lincoln Avenue extension. These buildings were originally separate establishments, but have been reconfigured over the years to allow expansion of the market and bakery. Presently, these buildings represent one expanded building. To the east fronting Station Place is a one-story, wood- framed, commercial building that used to be a grocery store but is now a fish market and cafe. The Waldorf Hotel, built in 1898 as a rooming house, is a two-story, wood-framed, vernacular Victorian Style building. The original simple rectangular-plan, front gable façade exhibits multiple additions and alterations as evidenced by the hipped roof extension fronting Station Place.

The National Steinbeck Center and an adjacent row of 1880 vintage Victorian two-story storefront buildings front the south side of Market Street, across from the site. One such building is shown in Figure 3.1-18; however, some of the facades exhibit alterations to the original buildings.

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**Figure 3.1-13. Salinas Facility Site #2
Amtrak Station**



Source: Parsons June 3, 2005

**Figure 3.1-14. Salinas Facility Site #2
Historic Freight Depot**



Source: Parsons June 3, 2005

**Figure 3.1-15. Salinas Facility Site #2
Historic Caboose**



Source: Parsons December 13, 2004

**Figure 3.1-16. Salinas Facility Site #2
Historic Harvey Baker House**



Source: Parsons December 13, 2004

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**Figure 3.1-17a. Salinas Facility Site #2
Surface Parking & Other Site Features**



Source: Parsons June 3, 2005

**Figure 3.1-17b. Salinas Facility Site #2
Surface Parking & Other Site Features**



Source: Parsons June 3, 2005

**Figure 3.1-18. Salinas Facility Site #2
Historic Building on
Palmetto Street**



Source: Parsons December 13, 2004

**Figure 3.1-19. Salinas Facility Site #2
View of Sacred Heart Church from Site**



Source: Parsons December 13, 2004

On the west side of the El Aguila building is an on-site, paved, surface parking lot that fronts Market Street and is in front of the renovated Granary building. A three-story, modern office building (remodeled Granary Building) is located between the parking lot and the freight depot. Additional modern industrial properties and parking lots are located further west of Palmetto Street.

Visual Resources, Viewsheds, and Viewer Groups

The site is part of an entirely built environment, with several buildings and paved surface parking areas. There are no natural scenic resources at the site, or within view from the site. The site topography is generally flat, and there are no views of distant hills or other scenic resources from the site. Industrial uses comprise views north and west of the site. Views from the site to the south and east consist of a built environment comprised of mixed commercial/residential uses, the National Steinbeck Center and the Sacred Heart Church and School. The cathedral of the Sacred Heart Church is a large two-story, front-gable with cross-gable wings NeoSpanish Style stucco building with three-story square bell tower, and has a notably high visual quality. Sacred Heart Church is shown in Figure 3.1-19.

The site is located northwest of the historic Oldtown Salinas, at the head of Main Street, but is not within the Oldtown historic district. This area of the City is undergoing a revitalization that is partially intended to preserve the historic character of the City. The historic Southern Pacific railroad structures and the Harvey-Baker House on the Salinas ITC Expansion site are important visual resources, and contribute to the visual character and fabric of the area. However, no historic district has been established for these railroad buildings.

The site is considered to have a high visual sensitivity, for the following three reasons: the presence of several historic structures that are considered visual resources, the visual importance of the historic structures as part of a cohesive historic district, and because the site is part of a focal location with high visibility within the City due to its vicinity to major cultural centers and tourist attractions - the National Steinbeck Center and Harvey-Baker House.

Major and sensitive viewer groups in the area include tourists, regular motorists and other commuters who utilize Market Street, patrons of commercial properties and other pedestrians in the project vicinity, attendees of the Sacred Heart Church and School, and residents of the apartment complex on Market Street, across from the site.

3.1.3 REGULATORY SETTING

Monterey County General Plan

Monterey County's government is responsible for regulating land use in the unincorporated areas of the County, including the communities of Pajaro and Castroville. The current General Plan was fully updated and adopted in 1982, and contains the following fundamental land use goals and their respective objectives and policies, intended to preserve scenic and other visual resources within the County:

General Land Use Goal 26

To promote appropriate and orderly growth and development while protecting desirable existing land uses.

General Land Use Policy 26.1.6

Development which preserves and enhances the County's scenic qualities shall be encouraged.

General Land Use Policy 26.1.7

Where appropriate, the County shall develop standards and/or procedures to control development, siting, design, and landscaping.

General Land Use Policy 26.1.8

Development in scenic road and highway corridors shall be governed by policies located in the transportation section of the General Plan.

Scenic Highways Goal 40

To maintain and enhance a system of scenic roads and highways through areas of scenic beauty; this without imposing undue restrictions on private property or constricting the normal flow of traffic.

Scenic Highways Policy 40.2.1

Additional sensitive treatment provisions shall be employed within the scenic corridor, including placement of utilities underground, where feasible; architectural and landscape controls; outdoor advertising restrictions; encouragement of area native plants, especially on public lands and dedicated open spaces; and cooperative landscape programs with adjoining public and private open space lands.

Scenic Highways Policy 40.2.2

Land use controls shall be applied or retained to protect the scenic corridor and to encourage sensitive selection of sites and open space preservation. Where land is designated for development at a density which, should maximum permissible development occur, would diminish scenic quality, the landowner shall be encouraged to voluntarily dedicate a scenic easement to protect the scenic corridor.

Monterey County Community General Plan

The Monterey County Community General Plan was developed in January 2005 by eight citizen sponsoring groups, and is under review by the Monterey County Supervisors for adoption. A summary of relevant goals and policies in the Community General Plan intended to protect visual resources within the County is provided below:

Open Space Goal #2:

Protect the scenic resources of the County for environmental quality and to support the economic vitality of the County's hospitality, tourism, and visitor-serving industry.

The policies to support Goal #2 of the Monterey County Community General Plan are the same as Policies 9.1, 9.2, 9.4, 9.7, and 9.8 of the Monterey County General Plan Update, listed above.

North County Area Plan

The North County Area Plan is an area land use plan that is part of the Monterey County General Plan. The proposed Castroville and Pajaro Valley station locations are under jurisdiction of the Monterey North County Area Plan. Highly sensitive scenic routes and the areas that significantly contribute to the scenic routes are identified in the Monterey North County Area Plan. The stretch of Highway 156 within the vicinity of the Castroville Site #2 is designated as a County Scenic Highway. No policies supplemental to the Monterey County General Plan regarding scenic resources were developed as part of the North County Area Plan.

Monterey County Inland Title 21 Zoning Ordinance

Additionally, the County's Zoning Ordinance supports the visual resource goals and policies of the Monterey County General Plan. The City's Zoning Ordinance addresses design related issues such as design review for certain projects, sign review and tree preservation. *Chapter 21.46 Visual Sensitivity or "VS" Districts* provides district regulations for the review of development in those areas of the County of Monterey in which such development could potentially create adverse visual impacts when viewed from a common public viewing area.

Monterey County Local Coastal Program

The Coastal Act provides that its goals and policies are to be carried out by local government through a process of comprehensive and coordinated planning known as the Local Coastal Program (LCP). Each of the 15 counties and 53 cities along the coast are required to prepare an LCP for that portion of their jurisdiction within the coastal zone. The LCP is defined in Section 30108.6 of the Act as the local government's land use plans and implementing actions which, when taken together, meet the requirements of, and implement the policies of the Act at the local level. When completed and approved by the local governing body, the LCP must be submitted to the Regional and State Coastal Commissions

for certification. Once the LCP is certified, the local government assumes full permit authority for developments within the coastal zone.

The Local Coastal Program of Monterey County has consisted of three phases:

- Phase I Identification of coastal planning issues, defined as potential conflicts between Coastal Act policies and existing conditions, plans, and proposed uses. Preparation of a work program setting forth tasks necessary to resolve issues, and the establishment of work schedules and budgets and grant requests;
- Phase II Preparation, adoption and certification of the Coastal Land Use Plan; and
- Phase III Preparation, adoption and certification of Implementing Actions, including zoning ordinances, zoning district maps, and other programs necessary to carry out the Land Use Plan and supporting policies.

The coastal zone of Monterey County was divided into four segments for purposes of preparing plans that reflect the areas' distinctly different characters. The segments are North County, Big Sur, Carmel and Del Monte Forest. The North County segment includes the unincorporated area of the coastal zone from the Marina City limits to the Santa Cruz County boundary at the Pajaro River. The coastal zone extends inland to the legal limit, nearly to Highway 101, in order to include as much as possible of the Elkhorn Slough watershed.

Phase I for North County was completed and adopted by the County June 13, 1978, and was approved by the Coastal Commission on April 4, 1979.

North County Land Use Plan and Local Coastal Program

Properties in northern Monterey County within the coastal zone governed by the California Coastal Commission (CCC) are subject to the North County Land Use Plan (LUP). The LUP, one of four segments of the Monterey County Local Coastal Program (LCP), was certified by the CCC in June 1982. There have been several amendments to the LCP by the CCC since that time. The LCP is accompanied by the Monterey County Coastal Implementation Plan (Monterey County, 1988). One of the sites of the proposed project, the proposed Castroville Passenger Rail Station and parking area at Site 2, is within the coastal zone covered by the North County LUP, and will be subjected to an analysis of conformity with the LCP.

City of Salinas General Plan

The City of Salinas General Plan, adopted in 2002, contains land use goals and development policies intended to preserve scenic and other visual resources within the City. The Community Design Element of the City of Salinas General Plan is intended to help preserve and improve quality of life in Salinas by addressing: 1) the protection of the community's image and identity; 2) the preservation and enhancement of distinct neighborhoods and older areas in the community; 3) the implementation of community livability principles. The Conservation/Open Space Element of the General Plan also

identifies important historic and architectural resources to be protected. Goals and policies relevant to the proposed project intended to preserve and enhance visual resources in the City are provided below:

Goal CD-1:

Create and preserve a positive community image and identity.

Policy CD-1.4:

Use landscaping, design schemes and signing to improve the image and distinct identity of the city, its neighborhoods and its major gateways.

Policy CD-2.2:

Minimize potential light and sound impacts of new development on surrounding areas.

Policy CD-2.6:

Preserve architecturally important historic buildings that are capable of being adapted for viable use.

Policy CD-2.8:

Avoid large un-landscaped parking areas and blank building walls facing streets or adjoining properties.

Goal COS-4

Protect and Enhance Community Historic Resources.

Cultural Resources Policy COS-4.1

When historic buildings are renovated to extend their useful lives, the historic architecture should be maintained when possible.

City of Salinas Zoning Code

The City of Salinas Zoning Code contains development standards for all zoning districts within the City. The Zoning Code addresses design related issues such as site plan review requirements, and landscaping and signage standards through land use permit processes.

General Plan Goals, Objectives, and Policies

Table 3.1-1 summarizes goals, objectives, and policies that provide guidance for development in the project areas in relation to visual resources. The table also indicates which criteria in the Visual Resources Section are responsive to each set of policies.

Table 3.1-1

General Plan Goals, Objectives, and Policies
Visual Resources

Adopted Plan Document	Document Section	Document Numeric Reference	Policy	Relevant Evaluation Criteria
Monterey County 1982 General Plan	Chapter IV: Area Development, Transportation	Goal 26, Promote Appropriate Development & Protect Desirable Land Uses Goal 40, Scenic Highways	Policy 26.1.6 Encourage development which preserves and enhances the County's scenic qualities. Policy 26.1.7 Control development, siting, design, and landscaping. Policy 26.1.8 Development in scenic road and highway corridors shall be governed by policies located in the transportation section of the General Plan. Policy 40.2.1 Underground utilities and architectural and landscape controls. Policy 40.2.2 Land use controls to protect scenic corridors.	1, 2, 3, 4
Monterey County 2005 Community General Plan	Open Space	Open Space Goal #2, Protection of scenic resources	See Policies 9.1, 9.2, 9.4, 9.7, and 9.8 of the Monterey County General Plan Update	

Table 3.1-1

General Plan Goals, Objectives, and Policies
Visual Resources

Adopted Plan Document	Document Section	Document Numeric Reference	Policy	Relevant Evaluation Criteria
City of Salinas 2002 General Plan	Community Design Element	Goal CD-1, Preserve Community Image/Identity	Policy CD-1.4, Use of landscaping, signing to preserve distinct community identity.	1, 3, 4
		Goal CD-2, Neighborhood Revitalization	Policy CD-2.2 Minimize light and noise impacts Policy CD-2.6 Preserve architecturally important historic buildings. Policy CD-2.8 Parking lot landscaping	
	Conservation and Open Space Element	Goal COS-4, Protect and Enhance Community Historic Resources.	Policy COS-4.1 Renovate and maintain historic architecture when possible.	

Source: Parsons, 2005.

3.1.4 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The evaluation criteria for Visual Resources are presented in Table 3.1-2. These criteria are drawn primarily from the Monterey County and the City of Salinas General Plans, in addition to significance evaluation criteria pursuant to Appendix G of the CEQA Guidelines, and Federal Highway Administration (FHWA) Environmental Guidebook.

Table 3.1-1 identifies goals, objectives, and policies that provide guidance for development in relation to visual resources in the proposed station areas. The table also indicates which criteria presented in Table 3.1-2 that are responsive to each set of goals and policies.

Table 3.1-2

Evaluation Criteria with Point of Significance
Visual Resources

Evaluation Criteria	As Measured by	Point of Significance	Justification
1. Will the Project have a substantial effect on a scenic vista?	a. Level of visual contrast (change in form, line, color, texture, scale of landscape view) of middle or foreground views b. Degradation in visual quality of a specific scenic resource ³	Any strong visual contrast, notable viewshed obstruction, or loss/alteration of a scenic resource.	Monterey County General Plan CEQA Appendix G City of Salinas General Plan
2. Will the Project substantially damage scenic resources along a designated scenic highway?	a. Level of visual contrast (change in form, line, color, texture, scale of landscape) b. Amount of view obstruction (loss of view) c. Degradation in visual quality	Any strong visual contrast, notable viewshed obstruction, or loss/alteration of a scenic resource along a designated scenic highway.	Monterey County General Plan CEQA Appendix G City of Salinas General Plan Principles of visual management (e.g., Caltrans Environmental Procedures, Federal Highway Administration Visual Impact Assessment Manual)
3. Will the Project substantially degrade the existing visual character or quality of the site and its surroundings?	a. Level of visual contrast and alteration of original view (change in form, line, color, texture, scale of landscape) b. Degradation in visual quality	Any strong visual contrast or loss/alteration of a scenic resource.	Monterey County General Plan CEQA Appendix G City of Salinas General Plan California Environmental Quality Act Case Law
4. Will the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	High intensity light or glare directed towards private residences, passing pedestrians or motorists	Greater than 0 viewers affected	Monterey County General Plan CEQA Appendix G City of Salinas General Plan

Source: Parsons, 2005.

3.1.5 METHODOLOGY

Visual impacts are generally assessed by estimating the scope and scale of visual changes introduced by project components, the degree to which visual changes may be visible to viewers, and the general sensitivity of viewer groups.

Visual changes are usually measured by three factors: the amount of visual contrast that project components create (changes to form, line, color, texture, and scale in the landscape), the amount of view obstruction (loss of view) that occurs, and degradation of specific scenic resources (e.g., removal of scenic trees, architectural resources).

The baseline conditions were assessed based on a site visit, review of project site plans and aerial photos.

3.1.6 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION MEASURES

IMPACT: **VR-1: Will the Project have a substantial effect on a scenic vista?**

Analysis: *Less Than Significant, LPA and Alternate Castroville Passenger Station Site*

The proposed Pajaro station would not block existing scenic views of distant hillsides from the project site, or any other surrounding properties.

The proposed station would replace the existing Pajaro station building with a community use building (funded by others) and therefore, would not change views experienced by the residential and commercial properties located along the west side of Salinas Road, across from the site. Currently, these properties can view scenic, open agricultural fields beyond the site and train tracks, to the east. The proposed community use building would not substantially obstruct views of expansive agricultural lands to the east any more than it does presently. In addition, the historic use of the subject property for railroad support, including equipment and material stockpiling, was likely to have interrupted views of adjacent agricultural land during certain periods of time in the past. No scenic vistas would be substantially affected.

There are no scenic vistas within view of Castroville Station Site #1. The subject site is void of scenic resources, and is part of an industrial setting that is not part of any scenic vista. No impacts to scenic vistas would result from development of Castroville Station Site #1.

Castroville Station Site #2 is located along the existing train tracks in an area of scenic, expansive agricultural land that is located just outside the urban community center of Castroville. The site forms part of the western periphery of a large, wide stretch of scenic, relatively flat agricultural land that continues east and northeast from the site.

The proposed location of the station adjacent to elevated State Highway 156 would prevent the station from substantially interrupting scenic views of

agricultural land experienced by motorists on the highway. The location of the station on the periphery of the urban center of Castroville would also prevent the proposed project from substantially interrupting or degrading the scenic landscape of expansive agricultural land east of the urban center, beyond the train tracks. The proposed Castroville Station Site #2 station would not have a substantial, potentially adverse affect on a scenic vista.

The Salinas Intermodal Transportation Center and Layover Facility Site #2 is part of an entirely built environment, in an area of flat topography. There are no distant hills that offer notable views of the site. The site is not part of a scenic vista, and there are no scenic vistas in the area that would be impacted by the proposed facility. The proposed facility would not result in significant impacts to a scenic vista.

Mitigation: No mitigation is required.

IMPACT: VR-2. Will the Project substantially damage scenic resources along a designated scenic highway?

Analysis: *No Impact, Alternate Castroville Passenger Station Site*

There is no State or locally designated scenic highway or corridor adjacent to, or within view of the proposed Pajaro Station Site, Castroville Station Site #1, or Salinas Station site. Therefore, there would be no impacts to scenic resources along a designated scenic highway.

Mitigation: No mitigation is required.

Analysis: *Potentially Significant, LPA*

State Highway 156 is a designated State Scenic Highway that bounds the Castroville Station Site #2 to the south. The stretch of State Highway 156 through the project area is the westernmost stretch of the highway with the scenic designation. The scenic designation begins less than one-quarter mile west of the project area. State Highway 156 is elevated through the project area, and offers scenic views of expansive agricultural lands to the northwest, through the project area. There are no hills or other natural features visible on the horizon from Highway 156 in the project area. Views experienced from State Highway 156 are not expected to be substantially impacted by development of the proposed station, as the proposed station site is located near the boundary of Castroville's urban center. The subject site is not identified in the North County Planning Area as an area of visual sensitivity in conjunction with the scenic designation of Highway 156. Since State Highway 156 is elevated through the project area, the proposed station would not obstruct motorists' views of scenic agricultural landscape stretching further north and east. Although no significant scenic resources would be damaged, the proposed station would substantially alter the visual character and quality of the existing site, which is located within the viewshed of a designated scenic highway. Therefore, in compliance with *Policy ER-9.1 Development Review* of the Monterey County General Plan and Monterey County

Community General Plan, a Visual Impact Analysis Report for the proposed Castroville Site #2 will be required.

Mitigation: **VR-2: Conduct a Visual Impact Analysis of Final Design**

In compliance with *Policy ER-9.1 Development Review* of the Monterey County General Plan Update and Monterey County Community General Plan, a Visual Impact Analysis Report for the proposed Castroville Site #2 will be submitted to the Monterey County Planning and Building Inspection Department for review and approval at the time of final design of the project. The Visual Impact Analysis Report will include a visual impact analysis and graphic representation to determine how the proposed development would impact the scenic quality of the site, and facilities would be designed in a manner to minimize visual impacts. Application of sensitive treatment provisions such as placement of utilities underground, architectural and landscape controls (such as landscaped, vegetative barriers), and appropriate signage and roadway design would be explored in the report as mitigation measures to minimize visual impacts of the proposed station.

After

Mitigation: *Less than Significant*

Implementation of Measure VR-2 would ensure that potential visual impacts to the Highway 156 scenic designated corridor, resulting from the proposed Castroville Station Site #2, would be identified and adequately mitigated.

IMPACT: VR-3: Will the Project substantially degrade the existing visual character or quality of the site and its surroundings?

Analysis: *Significant, LPA and Alternate Castroville Passenger Station Site*

Pajaro Station Site. The project will replace the existing freight station and adjacent tool shed with a new community use building. The existing station was constructed in 1942 to replace the former 1870s passenger station. The existing station was built in the Moderne style architecture popular at the time, but is now used for storage and Watsonville rail yard support. . The physical condition of both the station and tool house buildings is poor, affecting the integrity of the building. There are better examples of this style of railroad station in the area (for example, the Palo Alto Southern Pacific Station in Palo Alto, California). Both the existing station building and the tool shed have been determined to not be eligible for listing on the NRHP (Parsons, 2005).¹

The change in character at the site resulting from development of the station would not block existing distant views of scenic hillsides and agricultural landscape, or otherwise degrade the existing visual character or quality of the site.

Castroville Station Site #1. The Castroville Station Site #1 is part of an industrial setting that is void of scenic resources. Although the proposed station

¹ For further information on the historic character of the structures, please refer to Section 3.4 Cultural Resources in this EA/EIR.

would substantially change the character of the existing vacant site, the proposed project would be visually compatible with the surrounding industrial setting, and would not result in adverse visual impacts.

Castroville Station Site #2. The proposed station platform at Castroville Site #2 would not alter protected or scenic views from Highway 156 (a designated scenic road). The project site is located adjacent to agricultural fields, UPRR rail line, and a residential development. The UPRR and Castroville Boulevard are the only features in this viewshed. As stated in the County General Plan (1982), “Development projects within the viewshed of designated scenic highways and roads, and from common public viewing including, vista points, beaches, parks, coastal trails, streams, and waters used for recreational purposes, shall be required to protect mountain, ocean, coastal views, or forests (views from mountain hiking trails are not included). The standard to be used in determining impacts to visual resource areas is whether any portion of the proposed development is visible from the scenic highway, or common public viewing areas.” The proposed platform and associated parking would be visible from Highway 156, but since the project would be located adjacent to agricultural fields, would not obscure or detract from any scenic views. Therefore, the proposed project at Castroville Station Site #2 would not result in adverse or significant visual impacts.

Salinas Intermodal Transportation Center and Layover Facility. Design Option 17, Site Plan A and Design Option 18, Site Plan A (hereafter called 17A and 18A) at the Salinas ITC propose to remodel an existing unused freight building for intercity bus passenger and other transit support operations. Design Options 17 Site Plan B and 18 Site Plan B (18B) would not use the freight building for intercity bus operations. Under Options 17B and 18B the freight building is still expected to be remodeled by the City of Salinas, and intercity bus parking would not be located at the freight building, but would instead be provided between the freight building and the existing Amtrak Station building. The freight building would be reused for some other commercial use, which has not yet been determined.

The Salinas Southern Pacific Freight Depot is located along the northern boundary of the project area. This structure is recommended as eligible for inclusion in the NRHP as part of the proposed federal undertaking because it is “...associated with events that have made a significant contribution to the broad patterns of our history.”

Salinas Intermodal Transportation Center and Layover Facility, ITC Expansion Site Configuration #17. Configuration 17 proposes the extension of Lincoln Avenue east of Market Street and construction of a four-level parking structure located on the north side of Market Street between Main Street and the extension of Lincoln Avenue. The on-site presence of the historic Amtrak station, caboose, freight depot, the Harvey-Baker House, and several clustered historic buildings lend a high visual sensitivity to the site. The location of these historic structures contributes additional visual sensitivity to the site.

Design Option 17A would remodel the existing unused freight building for intercity bus passenger and other transit support operations. The Salinas Southern Pacific Freight Depot is located along the northern boundary of the project area. This structure is recommended as eligible for inclusion in the NRHP as part of the proposed federal undertaking because it is "...associated with events that have made a significant contribution to the broad patterns of our history."

Option 17A would require the remodeling and expansion of the freight depot, a one-story, wood-framed, rectangular building, approximately 5,000 square feet in size. Remodeling efforts as part of the project would include the following:

- The newer horizontal wood siding and the asbestos siding would be removed. The vertical 12-inch wide siding would be removed, inspected for termite damage, and reused where needed on the north, east and west end elevations.
- The ramped concrete loading dock would be removed.
- Roofing materials would be replaced as needed, and the widened roof overhang would be restored to its original dimensions with wood braces replaced to match those on the north side elevation. The flat roof would be removed.
- The opening in the east gable end would be restored and the added door would be removed. The original smaller freight door opening would be restored.
- All doors and vertical siding on the north elevation would be inspected for damage, replaced as needed with salvaged materials from the south elevation, and refinished. Siding and doors on the south elevation would be removed and salvaged.
- Interior partitions would be removed and the opening to the exterior restored. Missing roof truss members would be replaced.
- The north elevation wooden loading dock is in disrepair and would be removed. The south elevation loading dock was extended for motor trucking purposes, but would be removed and salvaged for reuse at the adjacent train exhibit and/or REA building, and potentially for portions of the Caltrain loading platform to be located along the north side of the freight building.

- The elevation of the interior floor would be lowered to grade level to allow reuse of the building for intercity bus operations, passenger waiting and Americans with Disabilities Act (ADA) accessibility.

The station, freight depot, caboose, and the Harvey-Baker House will be retained and incorporated into the project as historic features. However, several buildings between Railroad Avenue and Market Street would be demolished to make way for the extension of Lincoln Avenue. The buildings between Railroad Avenue and West Market Street and along Station Place include a mixture of historic-era industrial, commercial and residential properties, a late 19th century Victorian residential hotel, and three early to mid 1900s one-story commercial buildings. The buildings that would be removed include the following:

- El Aguila Deli and Market (Commercial), 42-44 W. Market Street (1937)
- El Aguila Bakery (Commercial), 46-50 W. Market St. (1928)
- C.E. Bugbee Blacksmith Shop (Commercial), 52 W. Market St. (1908) (Used as an auto shop in 1940; presently in use as a warehouse for a construction company)
- Warehouse buildings behind American Supply Company, Happ Place
- Waldorf Hotel (Residential), Station Place (1898)
- Frank's Fish Market and Oliva's Cafe, Station Place (1930)

The extension of Lincoln Avenue requires the removal of the first five buildings listed above, while construction of a parking structure or parking lot requires removal of the fish market and café. It should be noted that none of these buildings were found eligible for the National Register of Historic Places (NRSP), California Register of Historical Resources (CRHR) or to have local historical significance (see Section 3.4, Cultural Resources). Recent activities have included the remodeling of the Granary Building with a modern exterior with a section that reaches an elevation of the equivalent of five stories tall, relocation of the Harvey-Baker house, and prior removal of several older buildings. There are several vacant lots amidst the parking lots in the existing setting of the ITC site. The area is currently in a state of transition.

Configuration 17 includes construction of a four-level parking structure with 700 parking spaces. The proposed four-level parking structure would be about 34 feet high total. Level 1 would be at grade, Level 2 would be about 10 feet above grade, Level 3 about 20 feet above grade, and Level 4 at about 30 feet above grade. Parking on the Level 4 would be the structure's rooftop. There would also be a 4-foot high wall surround on Level 4 to hide vehicles from view.

The 34-foot tall parking structure is not expected to create additional obstructions to existing views of the historic buildings on Railroad Avenue (freight depot, passenger station, REA building and the Harvey-Baker House), a scenic resource and tourist destination, from motorists and pedestrians on Market Street since there are currently one- and two-story buildings occupying the site. The extension of Lincoln Avenue would create views of the Freight Depot and Amtrak

Station from Market Street. Views of the Harvey-Baker House would still be visible from the corner of Main Street and Market. Currently, views to this structure are obscured from points along Station Place and Market Street due to the residence being set back to the easternmost corner of the ITC site. In addition, the parking structure would not create significant shadow impacts on the Amtrak station and adjacent historic cabooses and warehouse, since shadow impacts would be limited to sunset hours each day.

The parking structure would be designed to blend in with the visual character of the surrounding area and incorporate historic elements into its design, such as the Moderne style of the El Aguila Market building and/or the railroad building facades. The structure would require design approval by the City of Salinas Design Review board. In addition, the area between Market Street and the south side of the parking structure could be developed with new commercial buildings (not a part of this project). Commercial development would enhance the setting along Market Street and would conceal the structure from public view. The structure would be visible on the north side, which faces the historic railroad buildings. However, the parking structure is proposed to be constructed in order to serve the potential increase in users of these buildings that is expected from the Caltrain Extension project. Therefore, along with incorporation of design elements, the parking structure would not be expected to significantly impact the limited visual resources at the site.

Salinas Intermodal Transportation Center and Layover Facility, ITC Expansion Site Configurations #18A and #18B. Configuration Option 18 Site Plan A (hereafter called 18A) at the Salinas ITC proposes to remodel an existing unused freight building for intercity bus passenger and other transit support operations. Configuration Option 18 Site Plan B (18B) would not use the freight building for intercity bus operations. Under Option 18B the freight building is still expected to be remodeled by the City of Salinas. Under Option 18B intercity bus parking would not be located at the freight building, but would instead be provided between the freight building and the existing Amtrak Station building. The freight building would be reused for some other commercial use, which has not yet been determined. The Salinas Southern Pacific Freight Depot is located along the northern boundary of the project area. This structure is recommended as eligible for inclusion in the NRHP as part of the proposed federal undertaking because it is "...associated with events that have made a significant contribution to the broad patterns of our history."

- Option 18A would also require the remodeling and expansion of the freight depot, a one-story, wood-framed, rectangular building, approximately 5,000 square feet in size as described in Option 17A, above. Option 18B would also include remodeling of the freight building, with most of the same proposed changes described above being implemented. However, with this option bus loading would not take place within the south façade of the building. To reuse the building for other commercial use, the building would likely require addition of new heating,

ventilating and air conditioning systems, plus additional plumbing and electrical facilities.

Configurations #18A and #18B also propose the extension of Lincoln Avenue east of Market Street; thus, the same structures that would be removed with Configuration #17 would also be removed with both Configurations #18A and B to accommodate the road extension.

Three surface parking lots in place of the 34-foot parking structure are proposed with this configuration. One of the lots would be located in the same footprint as the parking structure in Configuration #17, and would therefore also require removal of the fish market and café, as discussed in Configuration #17. Visually, a parking lot at that location would not present any adverse effects on the historic railroad buildings along Railroad Avenue since that portion of the site is currently almost all surface parking lot. In addition, should additional parking be required in the future, Configurations #18A and #18B provide more opportunity to build a parking deck over the surface parking lots, as opposed to building additional floors on the parking structure. Design review by the Salinas Design Review Board would also be required in order to identify elements and features that could be added to provide for an improved visual environment to an area with surface parking lots. These elements could include historic-styled lighting and period-style fencing, along with enhanced pedestrian walkways.

As described in Mitigation Measure VR-2 (above), a visual impact analysis will be conducted prior to final design approval of either Configuration #17A/B or #18A/B. In addition, the following mitigation measures will be implemented.

Mitigation: **VR-3a: Incorporation of design standards to preserve historic visual character of the area.**

Pajaro Station Site: The proposed station would be designed to be consistent with the site's surrounding built environment, which could include elements of the original station's 1870s Victorian style station.

Castroville Station Site No. 1: No mitigation is necessary.

Castroville Station Site No. 2: No mitigation is necessary.

Salinas ITC and Layover Facility: With Options 17A and 18A, the project proposes to restore the historic freight depot for use as a functioning passenger train and intercity bus facility. The integrity of the freight station will be preserved by the removal of previous alterations and restoring the building to its original form while rehabilitating the building for reuse as a building supporting passenger and package goods transportation. Therefore, the project would be compatible with the existing historical character and integrity of the historic railroad buildings. The Secretary of the Interior encourages rehabilitation and reuse of historic structures.

Under Option 17B and Option 18B the reuse of the building has not been determined, but it is expected that the building would be preserved and restored by the City of Salinas. Views of the depot will be more prevalent since there will be no buses to obstruct views of the building.

Design elements and features of buildings that are removed for the extension of Lincoln Avenue would be incorporated into new structures proposed for the site.

VR-3b: Design parking to be compatible with surrounding character and setting.

The Salinas Design Review Board shall review and approve all designs for either a parking structure or parking lots to ensure that the selected configuration is compatible with the scale and character of the surrounding area. Aesthetic features such as materials and design, landscaping, and decorative lighting and fencing shall be incorporated consistent with City design guidelines in order to create a pedestrian friendly space and compatibility with the surrounding historic area.

After

Mitigation: *Less than Significant (Castroville Station Site #2; Configurations #17 and #18)*

Implementation of Mitigation Measures VR-2 and VR-3 would result in less than significant impacts on visual resources.

IMPACT: VR-4: Will the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Analysis: *Potentially Significant, LPA and Alternate Castroville Passenger Station Site*

The proposed project would introduce new lighting sources at the Pajaro Passenger Station site. Currently, only the periphery of this site is lit by street lighting along Salinas Road. The introduction of new night-time light sources to the site could potentially affect nighttime views experienced by nearby residences, resulting in potentially adverse impacts.

Castroville Station Site #1 is part of an industrial setting with existing night-time lighting. Introduction of lighting to the associated with development of the proposed station would be visually compatible with the surrounding industrial setting, and would not result in adverse visual lighting impacts.

The proposed station would introduce new lighting sources to Castroville Station Site #2. This site is currently void of lighting. The introduction of new night-time light sources to the site could potentially affect nighttime views experienced by nearby residences, resulting in potentially adverse impacts.

The Salinas ITC and Layover Facility Site is part of an existing built environment, with street and security exterior lighting. The proposed facility may result in additional lighting sources at the site; however the amount of additional lighting is not expected to result in adverse impacts to nearby uses. The proposed facility would incorporate design features that minimize glare affects, and cast light downward, and would comply with the City of Salinas Lighting Ordinance. Therefore, no significant lighting impacts are expected to result.

Mitigation: **VR-4: Prepare an Exterior Lighting Design**

In compliance with *Policy ER-9.8: Exterior Lighting* of the Monterey County General Plan Update and Monterey County Community General Plan, all platform and station exterior light sources shall be controlled and/or shielded to the downward direction so as not to glare beyond the limits of the parcel or be directly visible from common public viewing areas wherever feasible, and consistent with standards set by the County Planning & Building Inspection Department.

In addition, lighting impacts and appropriate lighting design features would be identified in the Visual Impact Analysis Report prepared for the Castroville Station Site #2 submitted to the County Planning & Building Inspection Department at the time of final design approval, as described in Mitigation Measure VR-2.

After

Mitigation: *Less than Significant*

Preparation of a Visual Impact Analysis Report would ensure lighting impacts would be adequately reduced. Compliance with *Policy ER-9.8: Exterior Lighting* of the Monterey County General Plan Update and Monterey County Community General Plan and any additional standards required by the Monterey County Planning & Building Inspection Department would ensure lighting impacts would be adequately reduced.

3.1.7 CUMULATIVE IMPACTS

Impact: VR-C1: Will the project have significant cumulative aesthetic impacts?

Analysis: *Potentially Significant, LPA and Alternate Castroville Passenger Station Site*

Construction and operation of the proposed Pajaro Passenger Station Station site is not anticipated to result in any cumulatively significant visual impacts. The proposed station at Castroville Site #1 would involve redevelopment of an existing industrial area. The proposed facility would be compatible with surrounding uses, and the construction and operation of this facility is not anticipated to result in cumulative visual impacts.

Construction and operation of the proposed station at Castroville Station Site #2 could result in stimulating transit-serving development within an agricultural area, which could result in a change to the existing landscape. However, the Monterey County General Plan and the Castroville Community Plan have identified polices that define growth patterns and community design for the area. Implementation of these policies that relate to visual resources and community design guidelines would help to minimize visual impacts from future projects.

Cumulative impacts to the visual character of the historic railroad buildings may result from demolition of other period structures in the vicinity. The loss of other

structures, namely structures that front Market Street, would further degrade the visual fabric that is characteristic of the emergent railroad industry in Salinas. Cumulative impacts that would result from the loss of additional historic structures within Oldtown would likely further diminish the character of Salinas, resulting in significant, cumulative visual impacts.

In addition, the Community Design Element of the City of Salinas General Plan identifies that the City is actively seeking developers for future projects within the 100 block of Main Street, such as a downtown hotel, entertainment venues, and a parking structure. These potential projects could also have an impact on visual resources resulting from designs that are out of scale and/or character with the surrounding historic buildings.

However, downtown Salinas is undergoing a development and economic transition. Already, the National Steinbeck Center and a new movie theatre complex are constructed in modern-style architecture and are located within the Oldtown Salinas district. The City has identified significant historic resources to preserve and is requiring either the rehabilitation of historic structures for contemporary uses or incorporating design elements and features such that new structures would blend in or be compatible with the visual and historic character of its surroundings.

3.1.8 CONCLUSION

Implementation of the above referenced mitigation measures would reduce impacts to visual resources resulting from the proposed project to less than significant with either alternative.

3.1.9 REFERENCES

City of Salinas, 2002. *City of Salinas General Plan, Community Design Element*.

FHWA , 2005. Federal Highway Administration Environmental Guidebook. Last updated April 20, 2005.

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Monterey County, 2005b. Notice of Preparation for the Castroville Community Plan Environmental Impact Report. June 1.

Parikh Consultants, Inc. 2002a. Initial Environmental Site Assessment Proposed Caltrain Extension Project, Pajaro, Monterey County, California. October.

Parsons, 2005. Site visit by Brynna McNulty, Parsons Staff on June 3.

3.2 AIR QUALITY

3.2.1 INTRODUCTION AND SUMMARY OF IMPACTS

This section evaluates the potential project impacts to local and regional air quality during construction and operation phases. The major emission sources from construction activities include construction equipment exhaust emissions, dust generated by mechanical disturbances, and wind blown dust from exposed surfaces. The proposed operation includes the trains traveling from Salinas to Gilroy and train riders commute from home to train stations. Vehicular emission reductions from commuters would also take place for those people who would take train to go to work rather than using personal vehicles. Criteria air pollutants emitted include particulate matter with an aerodynamic diameter less than ten micrometers (PM₁₀), nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), and sulfur oxides (SO_x). PM₁₀ is the primary air pollutant of concern during construction, while NO_x is the primary pollutant of concern during operation.

A summary of air quality impacts and mitigation measures is presented below. Full analyses of air quality impacts as described in this section are included in Section 3.2.6.

<i>IMPACT</i>	<i>SIGNIFICANCE BEFORE MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>SIGNIFICANCE AFTER MITIGATION</i>
AQ-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?	Less than significant	No mitigation necessary.	Less than significant
AQ-2: Would the project violate any air quality standard or contribute substantially to an existing or project air quality violation?	Less than significant	No mitigation necessary.	Less than significant
AQ-3: Would the project expose sensitive receptors to substantial pollutant concentrations?	Less than significant	No mitigation necessary.	Less than significant
AQ-4: Would the project create or expose a substantial number of people to objectional odors	No impact	No mitigation necessary.	No impact
AQ-C1: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	Less than significant	No mitigation necessary.	Less than significant

3.2.2 ENVIRONMENTAL SETTING

The State of California is divided geographically into 14 air pollution control districts. The proposed project is located within the Monterey Bay Unified Air Pollution Control District (MBUAPCD), which includes Monterey, San Benito, and Santa Cruz counties.

Meteorology and Topography

The primary factors affecting local air quality are the locations of air pollutant sources and the amounts of pollutants emitted, but meteorological and topographical conditions also are important. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants.

Temperature

Vertical temperature gradients influence the vertical stability of the atmosphere and vertical mixing of air pollutants. Unstable atmospheres have more vertical mixing than stable atmospheres. Typically, air temperatures decrease with altitude and facilitate mixing. However, a temperature inversion, which is a layer of warm air above a cooler layer of air, acts as a nearly impenetrable lid. Inversions severely limit vertical mixing of the atmosphere and thus decrease the vertical dilution of near-surface air pollutant emissions. Inversions occur frequently in the project area, typically at heights between ground level and about 500 feet above ground level. Summer inversions usually are caused by the compressional warming of air as it sinks toward the earth's surface under the influence of a semi-permanent high pressure zone known as the "Pacific High". When local or seasonal cooling of the earth's surface occurs, as it does most frequently during the fall and winter, ground-based inversions form. Both types of inversions can occur during the fall, contributing to high ozone and other air pollutant concentration levels.

Horizontal temperature gradients create wind flows that disperse air pollutants. Horizontal temperature gradients are greater near the coast due to differential heating between land and water surfaces. This effect is diminished inland in proportion to the distance from the ocean. The Salinas site is fairly sheltered from the effects of water bodies; thus, it experiences smaller temperature gradients and less efficient pollutant dispersion than the Castroville and Pajaro sites, which are closer to the coast. There are occasions when the Pacific High is especially strong and the project area experiences some of the effects of the Pacific Ocean.

Temperature can also play an important role in the production of pollutants. In the winter, the potential for high CO levels is related to minimum temperatures. Motor vehicles, the primary source of CO, run less efficiently and produce more CO when temperatures are lower. The lowest winter temperatures are usually

found in the inland sheltered valleys because these areas are protected from the moderating influences of the ocean and bays.

Precipitation

When precipitation occurs, air pollutants can be “washed out” of the atmosphere and/or prevented from entering the atmosphere. The summer climate of California is dominated by the Pacific High, located over the eastern Pacific Ocean. The Pacific High generally remains fixed offshore from May through September. Because of this persistent high-pressure cell, storms rarely affect California during summer, and precipitation is negligible. The long period of dry weather aggravates the problem of wind blown dust, resulting in generation of PM₁₀.

In winter, the Pacific High weakens and shifts southward and storms become more frequent. During the rainy weather periods, air pollution potential is very low. When clear conditions dominate during winter, surface-based radiative inversions often occur. Under these conditions, winds are light and the potential for accumulation/concentration of air pollutants is high.

Precipitation data show that the rainy season occurs primarily between November and April. Very little rainfall is observed during the rest of the year. The annual average precipitation for the area is approximately 12 inches in the Salinas Valley.

Wind

Light winds or calms limit the dilution of air pollutants as they disperse downwind from their source. Air pollutants can accumulate, especially in sheltered valleys, when light winds combine with reversals of wind direction between daytime and nighttime air flows, or when calms persist for extended periods.

In the project area, the predominant wind direction is from the west-northwest during the dry months of May through October, and from the west during the wet months of November through April.

Regional Air Quality

The Federal Clean Air Act (FCAA) Amendments of 1977 require that each state identify areas within its borders that do not meet federal primary standards (i.e., nonattainment areas). The FCAA required the preparation of a nonattainment plan showing how the federal standards were to be met by 1987.

Prior to 1988, there was no timetable for attainment of the State air quality standards. The California Clean Air Act (CCAA), enacted in 1988, requires local air pollution control districts to prepare air quality attainment plans for ozone and carbon monoxide.

Generally, these plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year periods. The CCAA also grants air districts explicit statutory authority to adopt indirect source regulations and transportation control measures, including measures to encourage or require the use of ridesharing, flexible work hours, or other measure which reduce the number or length of vehicle trips.

Local Air Basins

The California Air Resources Board (CARB) coordinates and oversees the activities of California’s single-county and multi-county unified air pollution control districts and regional air quality management districts. CARB and the various districts operate numerous air quality monitoring stations throughout the State. Data collected at those stations are used to classify areas and air basins as attainment or nonattainment for each criteria air pollutant based on whether ambient air quality standards have been achieved. CARB also is responsible for incorporating local nonattainment plans into the State Implementation Plans (SIP). The Project area (Pajaro, Castroville, and Salinas) is located in the North Central Coast Air Basin. The attainment status for the Monterey County portion of the basin is presented in Table 3.2-1.

Table 3.2-1

Attainment Status of Monterey County Portion of North Central Coast Air Basin

Parameter	State Status	Federal Status
Ozone	Nonattainment transitional	Unclassified/attainment
PM ₁₀	Nonattainment	Unclassified
PM _{2.5}	Attainment	Unclassified/attainment--
CO	Attainment	Unclassified/attainment
Nitrogen dioxide	Attainment	Unclassified/attainment
Sulfur dioxide	Attainment	Unclassified
Sulfates	Attainment	--
Lead (particulate)	Attainment	--
Hydrogen sulfide	Unclassified	--
Visibility reducing particles	Unclassified	--

Source: California Air Resources Board,
<http://www.arb.ca.gov/regact/area05/attc.pdf> (7/11/05)

Monitoring stations surrounding the project area include Salinas – #3, Moss Landing – Sandholt Road, and Watsonville – Airport Boulevard, which are in the vicinity of the proposed train station/platform sites. According to CARB 2002 to

2004 monitoring data, PM₁₀ State standards were exceeded at both Salinas #3 and Moss Landing monitoring stations. The monitoring stations did not record any days of 1-hour ozone and other pollutants exceedance based on national and state standards as presented in Table 3.2-2. However, the North Central Coast Air Basin, which includes Monterey, San Benito, and Santa Cruz counties, exceeded both national and state standards for ozone levels in 2002 and 2003 at other monitoring locations. The number of exceedance days equals the number of distinct days on which the relevant standard was exceeded at any monitoring site. If the standard was exceeded at more than one site on a given day, it only counts as one exceedance day for the broader region (Table 3.2-2).

Table 3.2-2

Criteria Pollutants Monitoring Levels and Exceedance Days

Pollutant/Standard	2004	2003	2002
<u>O₃ (1-hour at Salinas#3)</u>			
Maximum Concentration (ppm)	0.077	0.073	0.075
Days > CAAQS (0.09 ppm)	0	0	0
Days > NAAQS (0.12 ppm)	0		
<u>O₃ (1-hour at Watsonville)</u>			
Maximum Concentration (ppm)	0.087	0.074	0.074
Days > CAAQS (0.09 ppm)	0	0	0
Days > NAAQS (0.12 ppm)	0		
<u>O₃ (8-hour at Salinas#3)</u>			
Maximum Concentration (ppm)	0.070	0.063	0.062
Days > NAAQS (0.08 ppm)	0	0	0
<u>O₃ (8-hour at Watsonville#3)</u>			
Maximum Concentration (ppm)	0.071	0.063	0.058
Days > NAAQS (0.08 ppm)	0	0	0
<u>PM₁₀ (24-hour at Salinas#3)</u>			
Maximum Concentration (mg/m ³)	44 (45)	66 (67)	44 (46)
Days > CAAQS (50 µg/m ³)	0	21.0	0
Days > NAAQS (150 µg/m ³)	0	0	0
<u>PM₁₀ (24-hour at Moss Landing)</u>			
Maximum Concentration (mg/m ³)	56 (58)	87 (90)	58 (60)
Days > CAAQS (50 µg/m ³)	12.6	40.8	24.8
Days > NAAQS (150 µg/m ³)	0	0	0
<u>PM₁₀ (Annual at Salinas#3)</u>	16.2 (17.1)	18.6 (20.4)	17.6 (18.5)
<u>PM₁₀ (Annual at Moss Landing)</u>	24.9 (25.9)	30.1 (31.6)	27.7 (28.9)
<u>PM_{2.5} (24-hour at Salinas)</u>			
Maximum Concentration	22.3	15.9	23.5
Days > NAAQS (65 µg/m ³)	0	0	0

Pollutant/Standard	2004	2003	2002
PM_{2.5} (Annual at Salinas#3)	7.0 (No Data)	7.3 (7.3)	9.1 (9.1)
CO (8-hour at Salinas#3)			
Maximum Concentration (ppm)	1.21	1.09	1.38
Days > CAAQS (9.0 ppm)	0	0	0
Days > NAAQS (9.0 ppm)	0	0	0
CO (1-hour, Basin wide)			
Maximum Concentration (ppm)	2.3 (Year 2002)	3.3 (Year 2001)	3.5 (Year 2000)
Days > CAAQS (20.0 ppm)	0	0	0
Days > NAAQS (35.0 ppm)	0	0	0
NO₂ (1-hour at Salinas#3)			
Maximum Concentration (ppm)	0.139	0.053	0.049
Days > CAAQS (0.25 ppm)	0	0	0
SO₂ (24-hour, Basinwide)			
Maximum Concentration (ppm)	0.01 (Year 2002)	0.01 (Year 2001)	0.00 (Year 2000)
Days > CAAQS (0.04 ppm)	0	0	0
Days > NAAQS (0.14 ppm)	0	0	0
<ol style="list-style-type: none"> 1. Numbers in bold represent exceedances of the State standard. 2. Numbers without parenthesis for PM₁₀ and PM_{2.5} monitoring data represent Federal average values and numbers with parenthesis for PM₁₀ and PM_{2.5} monitoring data represent State average values. The differences are due to the use of different samplers. 			
Source: California Air Resources Board, www.arb.ca.gov (10/01/05)			
CAAQS: California Ambient Air Quality Standard			
NAAQS: National Ambient Air Quality Standard			

CARB has established State ambient air quality standards, many of which are more stringent than the corresponding NAAQS. In addition to the six criteria pollutants regulated by the CCAA, CARB has also established standards for hydrogen sulfide, sulfates, and vinyl chloride. State standards for SO₂ and lead (Pb) are not to be equaled or exceeded. Other State ambient air quality standards are never to be exceeded.

The CCAA, which became effective on January 1, 1989, provides a planning framework for attainment of State ambient air quality standards. Local air pollution control districts and air quality management districts with areas in violation of State ambient air quality standards are required to prepare plans for attaining the State standards. The CCAA Act provides for the classification of nonattainment air basins into three classes: moderate, serious, and severe. For each class, the CCAA specifies attainment guidelines that must be followed. For all classes, attainment plans are required to demonstrate a five percent per year

reduction in the emissions of nonattainment pollutants or their precursors, unless CARB determines that all feasible measures are being employed to reduce emissions.

3.2.3 REGULATORY SETTING

Federal Clean Air Act

The Federal Clean Air Act (FCAA) Amendments of 1977 (42 United States Code [U.S.C.] 7401 *et seq.*) states that the federal government is prohibited from engaging in, supporting, providing financial assistance for, licensing, permitting, or approving any activity that does not conform to an applicable SIP. Federal actions relating to transportation plans, programs, and projects developed, funded, or approved under 23 U.S.C. of the Federal Transit Act (40 U.S.C. 1601 *et seq.*) are covered under separate regulations for transportation conformity.

In the 1990 FCAA Amendments, the U.S. EPA included provisions requiring federal agencies to ensure that actions undertaken in nonattainment or attainment-maintenance areas are consistent with applicable SIPs. The process of determining whether a federal action is consistent with an applicable SIP is called conformity.

The EPA General Conformity Rule applies only to federal actions that result in emissions of “nonattainment or maintenance pollutants,” or their precursors, in federally designated nonattainment or maintenance areas. The EPA General Conformity Rule establishes a process to demonstrate that federal actions would be consistent with applicable SIPs and would not cause or contribute to new violations of the NAAQS, increase the frequency or severity of existing violations of the NAAQS, or delay the timely attainment of the NAAQS. The emissions thresholds that trigger requirements of the conformity rule for federal actions emitting nonattainment or maintenance pollutants, or their precursors, are called *de minimus* levels. The general conformity *de minimus* thresholds are defined in 40 CFR 93.153(b). The federal General Conformity Rule does not apply to federal actions in areas designated as nonattainment of only the CAAQS.

California Clean Air Act

The CARB administers the air quality policy in California. The CAAQS were established in 1969 pursuant to the Mulford-Carrell Act. These standards are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility-reducing particulates, hydrogen sulfide, and sulfates. The CCAA, which was approved in 1988, requires that each local air district prepare and maintain an air quality management plan (AQMP) to achieve compliance with CAAQS. These AQMPs also serve as the basis for preparation of the SIP for the State of California.

CARB establishes policy and statewide standards and administers California's mobile source emissions control program. In addition, CARB oversees air quality programs established by state statute, such as Assembly Bill (AB) 2588, the Air Toxics "Hot Spots" Information and Assessment Act of 1987.

Ambient Air Quality Standards

National air quality policies are regulated through the FCAA of 1970 and its 1977 and 1990 amendments. Pursuant to the FCAA, the U.S. EPA has established NAAQS for six air pollutants: carbon monoxide (CO), ozone (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter (PM₁₀), and lead (Pb). These pollutants are referred to as "criteria" pollutants because numerical criteria have been established for each pollutant that define acceptable levels of exposure. Table 3.2-3 summarizes the characteristics, health effects, and major sources of these criteria pollutants. The U.S. EPA has revised the NAAQS several times since their original implementation and will continue to do so as the health effects of exposure to air pollution are better understood. The standards in Table 3.2-4 reflect recent changes to the O₃ and PM₁₀ standards, and a new PM_{2.5} standard. The federal 1-hour O₃ standard will remain in effect until the U.S. EPA formally implements the 8-hour standard.

Under the 1977 amendments to the CAA, states with air quality that did not achieve the NAAQS were required to develop and maintain SIPs. These plans constitute a federally enforceable definition of the state's approach (or "plan") and schedule for the attainment of the NAAQS. Air quality management areas were designated as attainment, nonattainment, or unclassified for individual pollutants depending on whether or not they achieve the applicable NAAQS and CAAQS for each pollutant. In addition, California can designate areas as transitional. It is important to note that because the NAAQS and CAAQS differ in many cases, it is possible for an area to be designated attainment by EPA (meets NAAQS) and nonattainment by CARB (does not meet CAAQS) for the same pollutant.

Areas that were designated as nonattainment in the past, but have since achieved the NAAQS, are further classified as attainment-maintenance. The maintenance classification remains in effect for 20 years from the date that the area is determined by EPA to meet the NAAQS. Areas that lack monitoring data are designated as unclassified areas. Unclassified areas are treated as attainment areas for regulatory purposes.

California State Implementation Plan

The FCAA Amendments require a comprehensive attainment plan from every O₃ nonattainment area classified as serious, severe, or extreme. Because the North Central Coast Air Basin is classified as moderate nonattainment for ozone, it is not among the six nonattainment areas in California subject to the 1994 O₃ planning requirement.

In addition, California state law gives CARB the authority to adopt statewide regulations affecting many mobile sources, fuels and, more recently, consumer products. The

California SIP contains CARB's comprehensive plan for further controlling emissions from mobile sources and consumer products, which when in combination with other measures, will result in O₃ attainment in California.

Table 3.2-3

Major Criteria Pollutants

Pollutant	Characteristics	Health Effects	Major Sources
Ozone (O ₃)	A highly reactive photochemical pollutant created by the action of sunshine on ozone precursors (primarily reactive hydrocarbons and oxides of nitrogen.) Often called photochemical smog	Eye irritation Respiratory function impairment	The major sources of ozone precursors are combustion sources such as factories and automobiles, and evaporation of solvents and fuels.
Carbon Monoxide (CO)	Carbon monoxide is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels.	Impairment of oxygen transport in the bloodstream. Aggravation of cardiovascular disease. Fatigue, headache, confusion, dizziness. Can be fatal in the case of very high concentrations.	Automobile exhaust, combustion of fuels, combustion of wood in wood stoves and fireplaces.
Nitrogen Dioxide (NO ₂)	Nitrogen dioxide is a reddish-brown gas that discolors the air, formed during combustion.	Increased risk of acute and chronic respiratory disease.	Automobile and diesel truck exhaust, industrial processes, fossil-fueled power plants.
Sulfur Dioxide (SO ₂)	Sulfur dioxide is a color gas with a pungent, irritating odor.	Aggravation of chronic obstruction lung disease. Increased risk of acute and chronic respiratory disease.	Diesel vehicle exhaust, oil-powered power plants, industrial processes.
Respirable Particulate Matter (PM ₁₀)	Solid and liquid particles of dust, soot, aerosols and other matter which are small enough to remain suspended in the air for a long period of time.	Aggravation of chronic disease and heart/lung disease symptoms.	Combustion, automobiles, field burning, factories and unpaved roads. Also a result of photochemical processes.
Lead	Lead gasoline additives, non-ferrous smelters, and battery plants are the most significant contributors to atmospheric Pb emissions.	Seizures, mental retardation, and/or behavioral disorders.	Inhalation of air and ingestion in food, water, soil, or dust.

Table 3.2-4

Federal and State
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards	Federal Standards	
			Primary	Secondary
Ozone (O ₃)	1-Hour	0.09 ppm (180 µg/m ³)	0.12 ppm (235 µg/m ³)	
	8-Hour	No separate State Standard	0.08 ppm (157 µg/m ³)	
Respirable Particulate Matter (PM ₁₀)	24-Hour	50 µg/m ³	150 µg/m ³	
	AAM	20 µg/m ³	50 µg/m ³	
Fine Particulate Matter (PM _{2.5})	24-Hour	No separate State Standard	65 µg/m ³	
	AAM	12 µg/m ³	15 µg/m ³	
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 µg/m ³)	9 ppm (10 µg/m ³)	
	1-Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	
Nitrogen Dioxide (NO ₂)	AAM	NA	0.053 ppm (100 µg/m ³)	
	1-Hour	0.25 ppm (470 µg/m ³)	NA	
Sulfur Dioxide (SO ₂)	AAM	NA	0.030 ppm (80 µg/m ³)	NA
	24-Hour	0.04 ppm (105 µg/m ³)	0.14 ppm (365 µg/m ³)	NA
	3-Hour	NA	NA	0.5 ppm (1,300 µg/m ³)
	1-Hour	0.25 ppm (655 µg/m ³)	NA	NA
Lead	30-day average	1.5 µg/m ³	NA	
	Calendar Quarter	NA	1.5 µg/m ³	

Table 3.2-4

Federal and State
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards	Federal Standards	
			Primary	Secondary
Visibility-Reducing Particles	8-Hour (10:00 a.m. to 6:00 p.m., PST)	Extinction Coeff. = 0.23 km @ <70% RH	No Federal Standards	
Sulfates	24-Hour	25 µg/m ³		
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m ³)		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m ³)		

Source: California Air Resources Board, May, 2005.

¹This concentration was approved by the California Air Resources Board on April 28, 2005 and is expected to become effective in early 2006.

AAM – Annual Arithmetic Mean

µg/m³ – micrograms per cubic meter

NA – not applicable

ppm – parts per million

PST – Pacific Standard Time

Monterey Bay Unified Air Pollution Control District Air Quality Management Plan

The MBUAPCD prepared the 2004 AQMP for the Monterey Bay Region. It includes the following:

- Current air quality data and analysis of air quality trends;
- Revised emission inventory and emission forecasts;
- Updated analysis of emission reductions needed to meet and maintain the State ozone standard;
- Adoption of five stationary source control measures.

In addition, the 2004 AQMP carries forward the Transportation Control Measures (TCMs) adopted in the 2000 AQMP with updated information on TCM programs. Some of the adopted TCMs include:

- **Improved Public Transit Service:** This TCM includes increased capacity on existing routes, new routes proposed by public transit operators, and increased ridership on existing routes.
- **Areawide Transportation Demand Management:** This TCM includes expanded rideshare programs in Monterey and Santa Cruz counties, bicycle education programs, and expanded Transportation Management Association activity.
- **Park and Ride Lots:** This TCM provides a supporting role to transit and ridesharing TCMs.
- **Selected Intelligent Transportation System:** This TCM includes advanced traveler information system, advanced traffic management/emergency management system, advanced public transportation system which improves mobility for transit riders, and transit operation for system managers and other advanced features.
- **Reduction in the Rate of Increase of Passenger Vehicle Trips and Miles Traveled:** This TCM would reduce the Vehicle Miles Traveled.

Monterey County General Goals, Objectives, and Policies

Table 3.2-5 identifies goals, objectives, and policies that provide guidance regarding air quality in the Project area.

Table 3.2-5

General Plan Goals, Objectives, and Policies
Air Quality

Plan Document	Document Section	Document Reference	Policies Relevant Evaluation Criteria
Monterey County 1982 General Plan	Chapter II, Environmental Constraints, Objectives and Policies for Air Quality	Goal 20 Policy 20.1.2	The County should encourage the use of mass transit, bicycles, and pedestrian modes of transportation as an alternative to automobiles in its land use plan
Monterey County 1982 General Plan	Chapter II, Environmental Constraints, Objectives and Policies for Air Quality	Goal 20 Policy 20.2.4	The County shall operate in accordance with current regional, state, and federal air quality standards

Source: Monterey County General Plan, 1982

3.2.4 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

A project will normally have a significant adverse impact on air quality if it will violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The following significance criteria are used to evaluate air quality impacts associated with the construction phase and operational phases of the proposed Project and are presented in Table 3.2.6, Table 3.2.7 and Table 3.2.8, respectively.

Table 3.2-6

Threshold of Significance Construction Impacts

Pollutant: PM₁₀

Source	Threshold of Significance
Direct Emissions	82 lb/day*

Source: MBUAPCD, 2000

*District-approved dispersion modeling can be used to refute (or validate) the determination of significance if direct emissions would not cause an exceedance of CAAQS for PM₁₀.

Table 3.2-7

Construction Activity with Potentially Significant Impacts

Pollutant: PM₁₀

Activity	Potential Threshold*
Construction Site with minimal earthmoving	8.1 acres per day
Construction site with earthmoving (grading, excavation)	2.2 acres per day

Source: MBUAPCD, 1996

*Based on Midwest Research Institute, Improvement of Specific Emission Factors (1995). Assumes 21.75 working days per month and daily watering of site.

Note: Construction projects below the screening level thresholds shown above are assumed to be below the 82 lb/day threshold of significance, while projects with activity levels higher than those above may have a significant impact on air quality. Additional mitigation and analysis of project impact may be necessary for those construction activities.

Table 3.2-8

Thresholds of Significance for Criteria Pollutants of Concern
Operational Impacts

Evaluation Criteria	As Measured by	Point of Significance	Justification
1. Will project construction generate PM ₁₀ emissions?	PM ₁₀ emissions levels	≥ 82 lb/day	CEQA Guidelines, Monterey Bay Unified Air Pollution Control District, and California Air Resources Board
2. Will the project emit criteria pollutants?	Emissions	VOC ≥ 137 lb/day NO _x as NO ₂ ≥ 137 lb/day PM ₁₀ ≥ 82 lb/day SO _x as SO ₂ ≥ 150 lb/day	CEQA Guidelines, Monterey Bay Unified Air Pollution Control District, and California Air Resources Board
3. Will traffic generated by the proposed project increase carbon monoxide levels along local roadways?	Traffic congestion CO emissions	LOS at intersection/road segment degrades from D or better to E or F <u>or</u> V/C ratio at intersection/road segment at LOS E or F increases by 0.05 or more <u>or</u> : delay at intersection at LOS E or F increases by 10 seconds or more <u>or</u> reserve capacity at unsignalized intersection at LOS E or F decrease by 50 or more ≥ 550 lb/day	CEQA Guidelines, Monterey Bay Unified Air Pollution Control District, and California Air Resources Board

Source: Parsons 2005.

3.2.5 METHODOLOGY AND CALCULATIONS

In order to determine if the project would have significant impact, construction emissions of PM₁₀ and operational emissions of criteria air pollutants were calculated. The calculated emissions are compared to the respective construction and operational significant threshold listed in Table 3.2-6 to Table 3.2-8. The following sections present the methodologies and the results of the calculations. A CO hot spot analysis was not conducted because the traffic impact analysis by Parsons (Parsons, 2005) indicated that, after considering mitigation measures, all intersections under the Caltrain peak hour scenarios would have Level Of Service (LOS) of D or better, and there is no intersection that would change from LOS D or better to LOS E or F. Therefore, no intersections after

mitigation would have traffic conditions that could have potential CO significance impact as indicated in the Table 3.2-8. The network peak hour scenarios were not analyzed in this section since they reflect changes in bus operations which are exempt under CEQA.

3.2.5.1 Construction Emissions

The project related construction impact to the environment is determined by comparing the daily disturbance of soil to the screening significance threshold in Table 3.2-7. In order to obtain the daily disturbance of soil, total area of land to be disturbed in acreage was divided by number of days of disturbance. Table 3.2-9 presents the results of the calculation.

Table 3.2-9

Evaluation of Construction Impact
Pollutant: PM₁₀

Site	Land To Be Disturbed (acres)	Number of Days of Disturbance	Daily Disturbance (acres/day)	Significance Threshold (acres/day)
Pajaro	7.0	15	0.47	2.2
Castroville (Preferred Site)	9.4	15	0.63	2.2
Salinas (ITC)	12.1	20	0.61	2.2
Salinas (Layover Facility)	5.6	15	0.37	2.2
Castroville (Alternate Site)	5.6	15	0.37	2.2

It can be concluded from Table 3.2-9 that all grading and earthmoving activities at various sites proposed by the project would be below the significance threshold of construction emission of PM₁₀, subject to the condition that daily watering is required.

3.2.5.2 Operational Emissions

Operational emissions consist of emissions directly from new operations of trains and indirect emissions from passenger vehicles traveling to the train stations/platforms. The emissions decrease resulted from commuters taking train rather than driving to work is also calculated as an emissions credit. The above emissions for a typical working day are calculated.

Emissions From Train Operation

The MBUAPCD is composed all of Monterey County, San Benito County, and Santa Cruz County. The estimated round trip distance traveled by train within the boundary of Monterey County, San Benito County, and Santa Cruz County would

be 50.8 miles. It is assumed that by 2010 there would be two trains a day in operation, and by 2014 there would be four trains a day in operation. Therefore, the total miles traveled by train each day would be 101.6 miles by 2010 and 203.2 miles by 2014.

The emissions from train operations can be calculated by multiplying the emission factors listed in EPA documents (USEPA, 1992 and USEPA, 1997) to the inverse of mileage of the train as derived from the most recent information provided on the website of Bureau of Transportation Statistics (Bureau of Transportation Statistics, 2002), and total daily miles traveled within MBUAPCD. It was conservatively assumed that the train will haul six cars. In addition, trains would emit criteria air pollutants while idling. Currently, the reliable source of idling emissions from EPA only contains NO_x and PM. The NO_x and PM idling emission rates for four stroke locomotive engines are 620 grams/hour and 32 grams/hour, respectively (USEPA, 2004). It is assumed that each train would idle for four hours a day. The calculated results of train cruising emissions and idling emissions are presented in Table 3.2-10.

COMMUTER VEHICLES EMISSIONS FROM HOME TO TRAIN STATION

Each working day, passengers will commute to the train station from home by using various modes of transportation such as walking, bicycling, taking bus transit, driving to parking lot then riding on train, or being dropped off and taking train. No air emissions are associated to walking and bicycling. Change on bus transit if any as a result of the project would be exempted from NEPA and CEQA regulations. Therefore, only park and ride and auto drop off will have air emissions associated with the proposed project. The emissions from commuter vehicles traveling from home to train stations were calculated based on emission factors of grams per mile multiplied by total daily miles traveled by vehicles from home to each of the three train stations or platforms. Emission factors were derived from running latest EMFAC2002 model version 2.2. EMFAC2002 is the emission factor model developed by CARB that calculates vehicle emissions inventory and emission factors. The input parameters of EMFAC2002 include speed, temperature, humidity and other default data. The output of the EMFAC2002 contains emission rates or emission factors of criteria air pollutants. The total daily miles traveled by vehicles from home to each of the three train stations/platforms were based on the average distance from home to each of the three stations/platforms and a project study report by Parsons (Parsons, 2002) which specify the percentage of the commuter to walk, take bicycle, take bus, park and ride, or to be dropped off.

Table 3.2-10

Emissions from Train Operation

<i>Year 2010 Scenario</i>						
Daily Miles	Inverse of Mileage (gal/mile) ¹	VOC ^{2,4} (g/gal)	CO ² (g/gal)V	NO _x ² (g/gal)	PM ₁₀ ^{2,5} (g/gal)	SO _x ³ (g/gal)
101.6	1.50	9.1	27.4	163.0	5.7	16.3
Cruising Daily Emissions (lb/day)		3.1	9.2	54.8	1.9	5.5
Idling Emission Factor (g/hour)		NA	NA	620	32	NA
Idling Emissions (lbs/day)		NA	NA	10.9	0.6	NA
Total Train Emissions		3.1	9.2	65.7	2.5	5.5
<i>Year 2014 Scenario</i>						
Daily Miles	Mileage (gal/mile) ¹	VOC ^{2,4} (g/gal)	CO ² (g/gal)V	NO _x (g/gal)	PM ₁₀ ^{2,5} (g/gal)	SO _x (g/gal)
168	1.50	8.7	27.4	153.4	5.4	16.3
Cruising Daily Emissions (lb/day)		5.8	18.4	103.1	3.6	11.0
Idling Emission Factor (g/hour)		NA	NA	620	32	NA
Idling Emissions (lbs/day)		NA	NA	21.9	1.1	NA
Total Train Emissions		5.8	18.4	125.0	4.7	11.0

1. Based on data published on BTS website from year 1995 to 1999 of AMTRAK operation. (http://199.79.179.77/publications/national_transportation_statistics/2002/html/table_rail_profile.html). It was conservatively assumed that the train will haul six cars.
 2. Based on Technical Highlights of Emission Factors for Locomotives (USEPA, 1997).
 3. Based on Procedures for Emission Inventory Preparation Volume IV: Mobile Sources (USEPA, 1992).
 4. Assume all hydrocarbons are VOC.
 5. Assume all PM are PM₁₀.
- NA = Not Available.

Calculated emissions for park and ride and to be dropped off category are presented in Table 3. 2-11 and Table 3.2-12 for year 2010 and year 2014, respectively

Table 3.2-11

Daily Emissions from Commuter Vehicles (2010)

Daily Emissions	VOC	CO	NO _x	PM ₁₀	SO _x
Emission Factor (g/mile)	0.169	3.833	0.487	0.014	0.003
Daily Emissions (lb/day) at Pajaro Location with Total Daily Miles of 2726	1.02	23.04	2.93	0.08	0.02
Daily Emissions (lb/day) at Castroville Location with Total Daily Miles of 1125 ¹	0.42	9.51	1.21	0.03	0.01
Daily Emissions (lb/day) at Salinas Location with Total Daily Miles of 4846	1.36	30.83	3.92	0.11	0.02
<i>Grand Total (lb/day)</i>	<i>2.79</i>	<i>63.38</i>	<i>8.06</i>	<i>0.22</i>	<i>0.05</i>

1. It is assumed that the Alternative Site at Castroville will have same total daily miles as the Preferred Local Alternative

Table 3.2-12

Daily Emissions from Commuter Vehicles (2014)

Daily Emissions	VOC	CO	NO _x	PM ₁₀	SO _x
Emission Factor (g/mile)	0.094	2.438	0.303	0.013	0.003
Daily Emissions (lb/day) at Pajaro Location with Total Daily Miles of 3219	0.67	17.30	2.15	0.09	0.02
Daily Emissions (lb/day) at Castroville Location with Total Daily Miles of 16071	0.33	8.64	1.07	0.05	0.01
Daily Emissions (lb/day) at Salinas Location with Total Daily Miles of 5161	1.00	26.05	3.24	0.14	0.03
<i>Grand Total</i>	<i>2.00</i>	<i>51.99</i>	<i>6.46</i>	<i>0.28</i>	<i>0.06</i>

1. It is assumed that the Alternative Site at Castroville will have same total daily miles as the Preferred Local Alternative

EMISSIONS CREDIT FROM COMMUTER VEHICLES

Once the proposed project starts in 2010, the commuters in the neighborhood of Pajaro, Castroville, and Salinas will have the option to take train to the Santa Clara, San Mateo, and San Francisco areas to work. Therefore, the vehicle miles traveled (VMT) would be greatly reduced. The reduction on number of VMT as a result of using train to commute instead of driving was estimated for year 2010 and 2014. Only the daily reduction of miles within the MBUAPCD is included in the calculation of emissions credits associated with the project since only emissions within MBUAPCD are compared with the MBUAPCD emissions significance threshold. The daily reductions of VMT for 2010 and 2014 are 45,504 and 54,864, respectively. The reduced VMT are multiplied by emission factors as derived from EMFAC2002 model to get the reduction of emission rates in pounds per day. Table 3.2.13 presents the results of emission rate reductions.

Table 3.2-13

Daily Emissions Rate Reduction Credit from Commuter Vehicles

Year 2010	VOC	CO	NO_x	PM₁₀	SO_x
Emission Factor (g/mile)	0.132	3.330	0.457	0.010	0.003
Total Daily Emission Reduction (lb/day) Due to Daily VMT Reduction of 45,504	13.24	334.06	45.85	1.00	0.30
Year 2014	VOC	CO	NO_x	PM₁₀	SO_x
Emission Factor (g/mile)	0.073	2.108	0.283	0.010	0.003
Total Daily Emission Reduction (lb/day) Due to Daily VMT Reduction of 54,864	8.83	254.97	34.23	1.21	0.36

TOTAL OPERATIONAL NET INCREASE OF PROJECT EMISSIONS

The total operational net increase of project emissions are calculated by adding the train emissions to the home to train station commuter emissions and then subtracting the commuter emissions credit as a result of commuters taking the train instead of driving to work. Table 3.2-14 presents the calculated result which shows that operational total net increase of air pollutants NO_x, PM₁₀ and SO_x are

below the significance threshold. CO and VOC emissions would actually decrease as the result of the proposed action.

Table 3.2-14

Net Increase of Operational Emissions Associated with Proposed Project (lb/day)

Year 2010	VOC	CO	NO_x	PM₁₀	SO_x
Train Emissions	3.10	9.20	65.70	2.50	5.50
Commuter Vehicle Emissions from Home to Train Station	2.79	63.38	8.06	0.22	0.05
Commuter Emission Reductions within MBUAPCD1	(13.24)	(334.06)	(45.85)	(1.00)	(0.30)
2010 Total Net Increase of Operational Emissions	(7.35)	(261.48)	27.91	1.72	5.25
Year 2014	VOC	CO	NO_x	PM₁₀	SO_x
Train Emissions	5.80	18.40	125.0	4.70	11.00
Commuter Vehicle Emissions from Home to Train Station	2.00	51.99	6.46	0.28	0.06
Commuter Emission Reductions within MBUAPCD1	(8.83)	(254.97)	(34.23)	(1.21)	(0.36)
2014 Total Net Increase of Operational Emissions	(1.03)	(184.58)	97.23	3.77	10.7
Significance Threshold	137	550	137	82	150

1. Numbers in parenthesis represent negative values.

3.2.5.3 CO Hot Spot Analysis

Based on the traffic analysis and the significance threshold presented for traffic measures in Table 3.2-8, the following two intersections under the Caltrain peak hour scenarios are considered to have potential significant CO impact before traffic mitigation measures are taken:

- Intersection of Salinas Road and Railroad Avenue
- Intersection of Salinas Road and Station Driveway 1

Both of these two intersections are unsignalized intersections. Mitigation measures are proposed to install a traffic signal at the intersection of Salinas Road and Railroad Avenue. Studies show that after the mitigation, the intersection of Salinas Road and

Railroad Avenue will have LOS B, and the intersection of Salinas Road and Station Driveway 1 will have LOS D or better. Therefore, after considering mitigation measures, all intersections under the Caltrain peak hour scenarios would have LOS of D or better and there is no intersection that would change from LOS D or better to LOS E or F. No intersections after mitigation would have traffic conditions that could have potential CO significance impact as indicated in the Table 3.2-8. The network peak hour scenarios were not analyzed in this section as they are impacted by bus operations which are exempt under CEQA.

3.2.5.4 PM₁₀ Qualitative Hot Spot Analysis

As presented in Table 3.2-2, PM₁₀ background concentrations are well below the NAAQS but exceeded the CAAQS for both the Salinas #3 and Moss Landing monitoring sites. However, the project would not contribute to or exacerbate the violations since the predicted net increase of PM₁₀ emissions associated with the project would be below 5 percent of the significance threshold which is minimal.

3.2.6 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION MEASURES

The environmental impact and any recommended mitigation measures are summarized as follows based on the Check List for Significance of Air Quality Impacts presented in the 2004 CEQA Air Quality Guidelines adopted by MBUAPCD.

IMPACT: AQ-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

Analysis: *Less than Significant – LPA and Alternative Castroville Site No. 2*

The proposed action and the alternative will not emit 137 lb/day of VOC or NO_x, therefore, it would not contribute significantly to the regional emissions of ozone precursors of NO_x and VOC. In addition, the proposed action and alternative promote public transit and is consistent with the AQMP adopted by MBUAPCD. It can be concluded that the proposed action would not conflict or obstruct implementation of the applicable air quality plan.

Mitigation: No mitigation would be required.

IMPACT: AQ-2: Would the project violate any air quality standard or contribute substantially to an existing or project air quality violation?

Analysis: *Less than Significant – LPA and Alternative Castroville Site No. 2*

As presented in Table 3.2-14, the proposed action and the alternative would not generate any criteria air emissions above the significant threshold as defined in Table 3.2-6 to Table 3.2-8. In addition, after mitigation measures are taken for traffic impact, no affected and studied intersections for the Caltrain peak hour scenarios would generate traffic that significantly affects level of service as specified in Table 3.2-8.

Mitigation: No mitigation would be required.

IMPACT: AQ-3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Analysis: *Less than Significant – LPA and Alternative Castroville Site No. 2*

Since no “hot spot” would be generated which would have a LOS of E or LOS F for the Caltrain peak hour scenarios, and the existing background of CO are well below the standard, it is expected that no exceedance of CO CAAQS or NAAQS would occur. Qualitative PM₁₀ analysis in Section 3.2.5.4 indicated that the air quality impact from the project would not be significant. Since the construction would only be temporary, toxic air contaminant (TAC) from the exhaust of diesel construction equipment will only be for short term and would not likely to increase the risk of cancer. Most of the operational emissions from locomotives are dispersed along the path of the train and the number of operations is limited to four round trips daily. Maximum idling emissions for 2010 scenario are only 1.1 lbs/day comparing to total of 5.4 lbs/day from train operations. In addition, since the diesel particulate matter contributes to 70 percent of the cancer risk and the diesel PM₁₀ emission from train operations are below 6 percent of the significance threshold, the train operation would be unlikely to increase the cancer risk to the nearby sensitive receptors. Overall, no substantial pollutant concentrations would likely to occur.

Mitigation: No mitigation would be required.

IMPACT: AQ-4: Would the project create or expose a substantial number of people to objectional odors?

Analysis: *No Impacts – LPA and Alternative Castroville Site No. 2*

No objectional odors would be created by the proposed project as the emission from the project would not have any odor related sources.

Mitigation: No mitigation is required.

3.2.7 CUMULATIVE IMPACTS

IMPACT: AQ-C1: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Analysis: *Less than Significant – LPA and Alternative Castroville Site No. 2*

Section 4.3 of this report presented several other potential public transit service projects which would also occur within MBUAPCD. Generally these projects would tend to reduce VMT and attract passengers who would otherwise travel by personal vehicles. Since the emissions of the proposed project are below the minimum levels or significant thresholds, the proposed project would not significantly contribute to the cumulative impact if any and would not be inconsistent with the AQMP.

Mitigation: No mitigation is required.

3.2.8 CONCLUSION

Implementation of the proposed project or alternative sites would not result in significant impacts.

3.2.9 REFERENCES

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USEPA, 1992. Procedures for Emission Inventory Preparation Volume IV: Mobile Sources.

USEPA, 2004. Guidance for Quantifying and Using Long Duration Switch Yard Locomotive Idling Emission Reductions in State Implementation Plans.

3.3 BIOLOGICAL RESOURCES

3.3.1 INTRODUCTION AND SUMMARY OF IMPACTS

This section describes the plant communities, wildlife habitats, wetlands, and special-status species that occur within the project area and addresses potential project-specific and cumulative impacts to these resources. Impacts evaluated here include the potential for loss of sensitive plant communities and wildlife habitats, potential for loss of special-status species (endangered, threatened, rare, or otherwise protected), blockage of major migration corridors, potential detrimental effects to nesting raptors, and effects on regional conservation planning efforts including those taking place in the Elkhorn Slough National Estuarine Preserve and the Monterey Bay National Marine Sanctuary.

A summary of biological resources impacts and mitigation measures is presented below. Full analyses of the impacts are included in Section 3.3.6.

<i>IMPACT</i>	<i>SIGNIFICANCE BEFORE MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>SIGNIFICANCE AFTER MITIGATION</i>
BIO-1: Will the project cause loss of individuals or occupied habitat of endangered, threatened, or rare fish, wildlife or plant species?	Potentially significant	BIO-1: Conduct floristically-based special-status plant surveys for Congdon's tarplant at Castroville sites and if found, redesign the project to avoid the plants or provide compensation and habitat restoration.	Less than significant
BIO-2: Will the project cause loss of individuals of CNPS List 2, 3, or 4 plant species?	Less than significant	No mitigation necessary.	Less than significant
BIO-3: Will the project cause loss of active raptor nest or other breeding sites?	Less than significant	No mitigation necessary.	Less than significant
BIO-4: Will the project cause a permanent loss of sensitive wildlife habitats?	Less than significant	No mitigation necessary.	Less than significant
BIO-5: Will the project cause a permanent loss of sensitive native plant communities?	No impact	No mitigation necessary.	No impact
BIO-6: Will the project substantially block or disrupt major fish or wildlife migration or travel corridors?	No impact	No mitigation necessary.	No impact
BIO-7: Will the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or	No impact	No mitigation necessary.	No impact

<i>IMPACT</i>	<i>SIGNIFICANCE BEFORE MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>SIGNIFICANCE AFTER MITIGATION</i>
other approved local, regional, or State habitat conservation plan?			
BIO-8: Will the Project destroy wetlands or waters of the U.S. or waters of the State?	No impact – Alternate Castroville Site Potentially significant - LPA	No mitigation necessary. BIO-8: Avoid wetlands to the extent feasible and compensate for any wetlands that cannot be avoided.	No impact Less than significant
BIO-C1: Will the project have significant cumulative impacts to biological resources?	Less than significant	No mitigation necessary.	Less than significant

3.3.2 ENVIRONMENTAL SETTING

Description of Proposed Project Sites

Pajaro Passenger Station Platform at Site #1 (Watsonville Junction)

Located at Watsonville Junction, the Pajaro Platform Site #1 is on the nearly level floodplain of the Pajaro River near the unincorporated community of Pajaro just southeast of the Pajaro River and the Santa Cruz County line. The City of Watsonville is just west and north of the site and across the river. The site is bordered by Salinas Road on the west, Lewis Road on the south, the UPRR mainline to the east and the Santa Cruz to Davenport branch line to the north. The Pajaro River and its damaged riparian ecosystem is ½ mile to the northwest of the western edge of the railroad junction. Soils in the area have been mapped by the Natural Resources Conservation Service (NRCS) as belonging to the Clear Lake series. The specific soil type is the Clear Lake clay, wet (NRCS, 1978). These soils support a sparse ruderal disturbed plant community.

The site is located in a light industrial land use area on a site currently used by the UPRR. Across Salinas Road to the west are commercial buildings. To the east, on the other side of the UPRR mainline is agricultural land. Bordering Lewis Road is a trucking yard and a strawberry field. In front of the former Southern Pacific Railway Station, the ruderal areas are dominated by English plantain (*Plantago lanceolata*) and knotweed (*Polygonum arenastrum*). A Monterey pine (*Pinus radiata*), and a Monterey cypress (*Cupressus macrocarpa*) are the principal ornamental trees that grow at Watsonville Junction. A single dracena (*Dracena goldieana*) occurs in the planter in front of the former depot.

Castroville Passenger Station Platforms at Site #1 and Site #2

Castroville Platform Site #1 is located along Del Monte Avenue. The area immediately adjacent to the existing Main line is heavily disturbed and was once the location of the Castroville passenger station with trackage that has since been removed. The soils at Site #1 are mapped as belonging to the Santa Ynez series; Santa Ynez fine sandy loam, 2 to 9 percent slopes (Natural Resources Conservation Service 1978). Little vegetation exists and what is present is ruderal.

Castroville Platform Site #2 is within an agricultural field that lies just north of State Route 156. The Moro Cojo slough is located approximately ½ mile north of the proposed site. Collins Road, Benson Road, an open field with ruderal disturbed vegetation, and State Route 156 are immediately south and east of Site #2. The UPRR Main line bisects the agricultural field, and the western limit of the agricultural field is bounded by a wetland ditch that connects to Moro Cojo Slough. The ditch carries dry season flows of less than 1 cubic foot per second (cfs) and is underlain by hydric soils. Obligate and facultative hydrophytes characteristic of the region, including cattail (*Typha latifolia*) and eragrostoid sedge (*Cyperus eragrostis*), were observed.

Site soils have been mapped by the NRCS as belonging to the Cropley and Santa Ynez series. The specific soil types include the Cropley silty clay, 2 to 9 percent slopes and Santa Ynez fine, sandy loam, 2 to 9 percent slopes (Natural Resources Conservation Service 1978). These support crops including artichoke (*Cynara scolymus*). Ruderal disturbed vegetation in the adjacent field, along Collins Road, and along the UPRR Main line consists of English plantain, cheeseweed (*Malva parviflora*), wild radish (*Raphanus sativus*), and Bermuda buttercup (*Oxalis pes caprae*). Most of the Bermuda buttercup plants were found associated with the artichoke plants at the edge of the field.

The Moro Cojo Slough Management and Enhancement Plan was adopted by the County in 1996 to serve as the guide for future restoration activities for slough system. A mitigation bank was then established for Elkhorn Slough and Moro Cojo Slough as part of the Elkhorn Slough Watershed Conservation Plan (Schaffenberger, 1999) that was developed to identify and address threats, and to maintain the long-term viability of Elkhorn Slough and its related upland communities as a significant coastal system. The Plan's vision is to preserve an intact and interconnected network of natural communities, including over 4,000 acres of coastal marsh within Elkhorn and Moro Cojo Sloughs, the freshwater wetlands of McClusky Slough, a restored riparian forest in the lower Carneros Creek floodplain and a series of upland ridges with unfragmented maritime chaparral in the Elkhorn Highlands. The Plan envisions these natural communities surrounded by productive, habitat-compatible farmland, scenic vistas and residences. As a whole this landscape comprises 22,500 acres, or approximately one half of the total watershed.

Recommended fee and easement acquisitions include, among others, marsh and buffer portions of properties in western Moro Cojo Slough. Priority restoration projects include Moro Cojo Slough marshlands.

The following is a description of the Moro Cojo Slough zone, its critical biological resources, conservation goals, stresses and sources of stress, and strategies to achieve conservation goals. The Moro Cojo Slough Zone includes the marshes of Moro Cojo Slough and surrounding farmlands.

Conservation goals include:

- Protect marshes and adjacent freshwater wetlands and ponds
- Restore lands suitable for natural habitat
- Protect productive agricultural lands surrounding marshes

Major stresses and their sources include:

- Loss and conversion of habitats due to diking, ditching and grazing
- Decline of sensitive amphibian species due to sedimentation and contamination from uncontrolled agricultural runoff
- Future conversion of agricultural lands to development

Strategies include:

- Acquire key lands to protect and restore marsh habitat; and, where possible, utilize land swaps to secure further protection of natural habitat lands
- Acquire fee or easements on viable farmlands, especially those surrounding wetlands through fee or conservation easement purchase
- Provide adequate wetland buffers
- Restore natural habitat where suitable

The Plan identifies Moro Cojo Slough as Action 1 in Implementation Category 3: Acquire fee or conservation easements on key habitat-rich parcels and surrounding agricultural lands (these are the highest priorities for acquisition in the first three years, though other opportunities may arise which may equally meet conservation objectives). Wetland portions and buffers on three parcels in Moro Cojo Slough are slated for acquisition. Elkhorn Slough Foundation, in partnership with the Coastal Conservancy and other partners, will continue to acquire marsh portions of parcels in Moro Cojo Slough. This includes 280 acres of marshlands and buffers. Where possible, fee or conservation easements acquisition will be used to secure buffers on surrounding agricultural lands.

The Plan also identifies Moro Cojo Slough as Action 1 of Implementation Category 6: Restore and enhance natural habitats where suitable, and re-establish ecological linkages, identifies restoration of marsh habitat in Moro Cojo Slough. The Moro Cojo Slough Management and Enhancement Plan calls for restoration of seasonal freshwater habitats, and agricultural buffers. To carry out the recommendations in that plan, agencies will work closely with landowners to develop appropriate buffers both to protect remaining cultivated fields from tidal flows and flooding, and to protect wetlands from agricultural runoff.

Habitat Restoration Group. 1996. Moro Cojo Slough Management and Enhancement Plan. Monterey County Planning and Building Inspection Department and State Coastal Conservancy.

Salinas Layover Yard Facility at Site #2 and Intermodal Transportation Center (ITC)

The facilities proposed at Salinas will be clustered in the vicinity of the existing Amtrak station within a site used by UPRR, light industry, and commercial establishments. This area is totally urbanized within the limits of the City of Salinas. To the north the site is bordered by the UPRR main line and rail yard. Reclamation Ditch No. 1665 and the Main Canal, which contains wetlands, are located the north of the yard. The remainder of the site to the south, east, and west is either occupied by the existing railway station facilities or by commercial and light industrial land uses.

Site soils have been mapped by the NRCS as belonging to the Cropley and Salinas series. The specific soil types include the Cropley silty clay, 2 to 9 percent slopes and Salinas clay loam, 0 to 2 percent slopes (Natural Resources Conservation Service 1978), which supports ruderal disturbed vegetation.

Biological Resources in the Project Area

Plant Communities

Plant communities are assemblages of plant species occurring together in the same area, and are defined by species composition and relative abundance. Most descriptions of natural plant communities and their nomenclature are based on Holland (1986) and Sawyer & Keeler-Wolf (1995), however, the proposed sites do not contain native plant communities. A “cropland” classification, which is not covered in either Holland or Sawyer & Keeler-Wolf (these works stress natural plant communities and associations), is included to describe the cropland vegetation type occurring in the project area.

Cropland

Croplands are located on flat to gently rolling terrain that is tilled prior to commencement of crop production (Zeiner *et al.* 1988). Due to the artificially controlled growth and harvesting regime, croplands do not conform to normal seral stages (i.e., growth stage of habitat). These habitats may either be annual or perennial depending upon the crop-rotation system and geographic location. Crops grown in the project area include artichokes. Special-status plant species are not generally found in cropland.

Although cropland generally provides low to moderate habitat value for wildlife, low-growing row crops and fallow fields may provide important foraging habitat for resident open-country hawk species such as Swainson’s hawk (*Buteo swainsoni*), American kestrel (*Falco sparverius*) and red-tailed hawk (*Buteo*

jamaicensis). Ferruginous hawk (*Buteo regalis*), rough-legged hawk (*Buteo lagopus*), and prairie falcon (*Falco mexicanus*) also forage in fallow fields during the fall and winter months. Migratory waterfowl species such as Canada goose (*Branta canadensis*) may seasonally depend on croplands for foraging habitat. White-tailed kite and western burrowing owls may be associated with ruderal vegetation at the edges of croplands in the project area.

Ruderal Disturbed

Ruderal communities are often associated with areas of human disturbance. Wherever grading and development have extirpated native vegetation, a suite of plant species will invade and become established depending upon the frequency of continuing disturbance. Disturbance is caused by railroad activities, mechanized vehicles, bicycles, pedestrians, illegal dumping, paving activities, and agricultural operations. For example, in parking areas and along roadways paved with asphalt, the most common species that becomes established is knotweed (*Polygonum arenastrum*), which grows only in the crevices of the pavement.

At the other extreme, the edges of croplands and vacant lots often become vegetated with several flowering plant weeds including forbs and grasses. The most common forbs include field bindweed (*Convolvulus arvensis*), prickly lettuce (*Lactuca serriola*), prickly sow thistle (*Sonchus oleraceus*), Italian thistle (*Carduus pycnocephalus*), cheeseweed (*Malva parvifolia*), wild radish (*Raphanus sativus*), tumble mustard (*Sisymbrium altissimum*), field mustard (*Brassica nigra*), fennel (*Foeniculum vulgare*), and pigweed (*Amaranthus deflexus*). Grasses that become established in such sites are often weeds introduced from Europe, including wild oats (*Avena fatua*), Mediterranean barley (*Hordeum marinum*), Italian ryegrass (*Lolium multiflorum*), and Zorro fescue (*Vulpia myuros*).

Disturbed sites in seasonally wet, low-lying areas that gather runoff and collect water in the winter due to underlying clay soils often possess a slightly differing set of weeds. These weeds are poison hemlock (*Conium maculatum*), prickly oxtongue (*Picris echioides*), alkali mallow (*Malvella leprosa*), toad rush (*Juncus bufonius*), and spikeweed (*Hemizonia conjugata*), but also include the ubiquitous Italian ryegrass.

In the project area this plant community is found along the railroad right-of-way, and at the edges of fields created by agricultural operations, but not cropped. Special-status plant species are not generally found in ruderal disturbed areas, although there are exceptions, for example Congdon's tarplant (see later section).

A distinguishing characteristic of ruderal habitats is the mixture of native and exotic plant species. Exotic plant species may provide valuable habitat elements such as cover for nesting and roosting, as well as food sources such as nuts or berries.

Native and introduced animal species that are tolerant of human activities often thrive in ruderal habitats. These species include western fence lizard (*Sceloporus occidentalis*), northern mockingbird (*Mimas polyglottos*), barn swallow (*Hirundo*

rustica), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), European starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*), house finch (*Carpodacus mexicanus*), house mouse (*Mus musculus*), Norway rat (*Rattus norvegicus*), and opossum (*Didelphis marsupialis*). Special-status species that may occur in less disturbed ruderal habitats include western burrowing owl (*Athene cunicularia hypugea*).

Wildlife Habitats

Wildlife habitat provides cover, food, and water necessary to meet the biological requirements of one or more individuals of an animal species. Changes in habitats (e.g., change in seral stage within a particular habitat type or change from one habitat type to another) and changes in essential habitat elements that relate to reproduction, foraging, and cover requirements may impact abundance, distribution, diversity, and interactions between wildlife species. The wildlife habitats in the project area are identified herein based on the habitat classification system developed by the California Department of Fish and Game (CDFG) for the California Wildlife Habitat Relationships (CWHR) program (Mayer and Laudenslayer 1988).

Wetland Resources of the Region

There are no wetland resources within the boundaries of the proposed passenger stations at Pajaro, Castroville, and Salinas. Nevertheless, wetlands and the damaged riparian woodland of the Pajaro River are about 1/2 mile northwest of the western edge of the Pajaro site.

The sites at Castroville are within the watershed of the ecologically sensitive Moro Cojo Slough. Although not part of the present project, the Union Pacific Railroad mainline, which connects the Pajaro and Castroville sites, passes through the ecologically sensitive Elkhorn Slough, a part of the Elkhorn Slough National Estuarine Reserve, which is connected with the Monterey Bay National Marine Sanctuary.

At the site of the existing Salinas intermodal transportation hub, Reclamation Ditch No. 1665 and the Main Canal, which contains wetlands, is 1/4 mi. to the north. The Main Canal, managed by Monterey Water Resources District (MWRD), is the overflow for Carr Lake, about 1 mile to the east, which intercepts flows from Natividad and Gavilan creeks.

Special-Status Species

Special-status species include:

- plants and animals that are legally protected or proposed for protection under the California Endangered Species Act (CESA) or Federal Endangered Species Act (FESA);
- plants and animals defined as endangered or rare under the California Environmental Quality Act (CEQA);

- animals designated as species of special concern by the U.S. Fish and Wildlife Service (USFWS) or CDFG;
- animals listed as “fully protected” in the California Fish and Game Code (Sections 3511, 4700, 5050 and 5515) ; and
- plant species listed in the California Native Plant Society’s *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001).

Tables 3.3-1 and 3.3-2 list special-status plant and animal species identified by the USFWS, CDFG, California Natural Diversity Database (CNDDDB), and California Native Plant Society (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* (CDFG 2002, CNDDDB 2002, CNPS 2001, USFWS 2005) as occurring within the project area or vicinity. Those species determined by project biologists as being out of geographic or elevational range, or to have extremely low potential for occurrence within the project’s area of potential effects, are not presented in Tables 3.3-1 and 3.3-2.

Table 3.3-1

Special-status Plants That May Occur within the Proposed Project Area

Species	Federal	State	CNPS	Habitat Description	Bloom Period	Potential to Occur Within the Project Area
Hickman's onion <i>Allium hickmanii</i>	--	--	1B	Closed-cone coniferous forest, maritime chaparral, coastal prairie, coastal scrub, and valley and foothill grassland. Known only from Monterey and San Luis Obispo counties. Elevational range: 5-185m.	April-May	Unlikely. Suitable habitat is not present on site.
Santa Cruz manzanita <i>Arctostaphylos andersonii</i>	--	--	1B	Broadleaved upland forest, chaparral, north coast coniferous forest. Known only from the Santa Cruz Mountains. Elevational range: 180-800m.	November-April	Unlikely. Suitable habitat is not present on site.
Hooker's manzanita <i>Arctostaphylos hookeri</i> ssp. <i>hookeri</i>	--	--	1B	Sandy soils, sandy shales, and sandstone outcrops within chaparral, coastal scrub, closed-cone coniferous forest, and cismontane woodland. Known only from Monterey and Santa Cruz counties. Elevational range: 85-300m.	February-May	Unlikely. Suitable habitat is not present on site.
Monterey manzanita <i>Arctostaphylos montereyensis</i>	--	--	1B	Sandy soils within maritime chaparral, cismontane woodland, and coastal scrub. Known only from Monterey County. Elevational range: 30-730m.	February-March	Unlikely. Suitable habitat is not present on site.
Pajaro manzanita <i>Arctostaphylos pajaroensis</i>	--	--	1B	Occurs in chaparral on sandy soils. May be extinct in Santa Cruz County. Elevational range: 30-760m.	December-March	Unlikely. Suitable habitat is not present on site, may be extirpated from the County

Table 3.3-1

Special-status Plants That May Occur within the Proposed Project Area

Species	Federal	State	CNPS	Habitat Description	Bloom Period	Potential to Occur Within the Project Area
Sandmat manzanita <i>Arctostaphylos pumila</i>	--	--	1B	Sandy openings in closed-cone coniferous forest, maritime chaparral, cismontane woodland, coastal dunes, and coastal scrub. Known only from Monterey County from fewer than 20 occurrences. Elevational range: 3-205m.	February-May	Unlikely. Suitable habitat is not present on site.
Kings Mountain manzanita <i>Arctostaphylos regismontana</i>	--	--	1B	Broadleaved upland forest, chaparral, north coast coniferous forest on granitics or sandstone. Elevational range 305-730m.	January-April	Unlikely. Suitable habitat is not present on site.
Alkali milk-vetch <i>Astragalus tener</i> var. <i>tener</i>	--	--	1B	Alkaline and clayey vernal pools, playas, and foothill grasslands. Elevational range 1-60m.	March-June	Unlikely. Suitable habitat is not present on site.
Coastal dunes milk-vetch <i>Astragalus tener</i> var. <i>titi</i>	FE	--	1B	Coastal bluff scrub (sandy), coastal dunes, coastal prairie. Elevational range 1-50m.	March-May	Unlikely. Suitable habitat is not present on site.
Congdon's tarplant <i>Centromadia parryi</i> ssp. <i>congdonii</i>	--	--	1B	Valley and foothill grassland on alkaline soils. Reported as extirpated from Santa Cruz County by CNPS (2001). Elevational range: 1-230m.	June-November	Suitable habitat present at all three sites. The Castroville site is near a recent CNDDDB record. Plants were not present in a November 2002 survey, but spring and summer Special Status plant preconstruction surveys are recommended.

Table 3.3-1

Special-status Plants That May Occur within the Proposed Project Area

Species	Federal	State	CNPS	Habitat Description	Bloom Period	Potential to Occur Within the Project Area
Purple amole <i>Chlorogalum purpureum</i> var. <i>purpureum</i>	FT	--	1B	Chaparral, cismontane woodland, valley and foothill grassland on gravel or clayey substrates. Elevational range: 240-340m.	April-June	Unlikely. Suitable habitat is not present on site.
Monterey spineflower <i>Chorizanthe pungens</i> var. <i>pungens</i>	FT	--	1B	Sandy soils in maritime chaparral, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland. Elevational range: 3-450m.	April-June	Unlikely. Suitable habitat is not present on site.
Robust spineflower <i>Chorizanthe robusta</i> var. <i>robusta</i>	FE	--	1B	Cismontane woodland (openings), coastal dunes, and coastal scrub on sandy or gravelly substrates. Elevational range: 3-300m.	April-September	Unlikely. Suitable habitat is not present on site.
Seaside bird's-beak <i>Cordylanthus rigidus</i> ssp. <i>littoralis</i>	--	SE	1B	Sandy often disturbed sites in closed-cone coniferous forest, maritime chaparral, cismontane woodland, coastal dunes, and coastal scrub. Elevational range 0-215m.	May-October	Unlikely. Suitable habitat is not present on site.
Gowen cypress <i>Cupressus goveniana</i> ssp. <i>goveniana</i>	FT	--	1B	Closed-cone coniferous forest, maritime chaparral. Elevational range: 30-300m.	N/A	Unlikely. Suitable habitat is not present on site.
Hutchinson's larkspur <i>Delphinium hutchinsoniae</i>	--	--	1B	Broadleaved upland forest, chaparral, coastal prairie, and coastal scrub. Elevational range 0-400m.	March-June	Unlikely. Suitable habitat is not present on site.
Eastwood's goldenbush <i>Ericameria fasciculata</i>	--	--	1B	Sandy openings in closed-cone coniferous forest, maritime chaparral, coastal scrub, and in coastal dunes. Elevational range 30-275m.	July-October	Unlikely. Suitable habitat is not present on site.

Table 3.3-1

Special-status Plants That May Occur within the Proposed Project Area

Species	Federal	State	CNPS	Habitat Description	Bloom Period	Potential to Occur Within the Project Area
Coast wallflower <i>Erysimum ammophilum</i>	--	--	1B	Sandy openings in maritime chaparral, coastal dunes, and coastal scrub. Elevational range: 0-60m.	February-June	Unlikely. Suitable habitat is not present on site.
Menzies' wallflower <i>Erysimum menziesii</i> ssp. <i>menziesii</i>	FE	SE	1B	Coastal dunes in Mendocino and Monterey counties. Elevational range: 0-35m.	March-June	Unlikely. Suitable habitat is not present on site.
Yadon's wallflower <i>Erysimum menziesii</i> ssp. <i>yadonii</i>	FE	SE	1B	Coastal dunes. Known only from six occurrences near Marina on Monterey Bay. Elevational range: 0-10m.	May-September	Unlikely. Suitable habitat is not present on site.
Fragrant fritillary <i>Fritillaria liliacea</i>	--	--	1B	Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland often on serpentinite. Elevational range: 3-410m	February-April	Unlikely. Suitable habitat is not present on site.
Sand gilia <i>Gilia tenuiflora</i> ssp. <i>arenaria</i>	FE	ST	1B	Coastal dunes, coastal scrub, maritime chaparral, and cismontane woodland. Occur in bare, wind sheltered areas, often near dune summit or in the hind dunes. Endemic to Monterey County. Elevational range: 0-45m.	April-June	Unlikely. Suitable habitat is not present on site.
Santa Cruz tarplant <i>Holocarpha macradenia</i>	FT	SE	1B	Light, sandy soil or sandy clay in coastal prairie, and valley and foothill grassland communities, often with non-natives. Elevational range: 10-220m.	June-October	Unlikely. Suitable habitat is not present on site.

Table 3.3-1

Special-status Plants That May Occur within the Proposed Project Area

Species	Federal	State	CNPS	Habitat Description	Bloom Period	Potential to Occur Within the Project Area
Kellogg's horkelia <i>Horkelia cuneata</i> ssp. <i>sericea</i>	--	--	1B	Openings within closed-cone coniferous forest, maritime chaparral on sandy or gravelly substrate. Elevational range: 10-200m.	April-September	Unlikely. Suitable habitat is not present on site.
Contra Costa goldfields <i>Lasthenia conjugens</i>	FE	--	1B	Valley and foothill grassland, vernal pools, cismontane woodland. Elevational range: 1-445m.	March-June	Unlikely. Suitable habitat is not present on site.
Beach layia <i>Layia carnosa</i>	FE	SE	1B	Coastal dunes and sandy coastal scrub, Elevational range: 0-60m.	March-July	Unlikely. Suitable habitat is not present on site.
Tidestrom's lupine <i>Lupinus tidestromii</i>	FE	SE	1B	Coastal dunes. Known from fewer than 20 occurrences. Elevational range: 0-100m.	April-June	Unlikely. Suitable habitat is not present on site.
San Joaquin woollythreads <i>Monolopia (Lembertia) congdonii</i>	FE	--	1B	Chenopod scrub and valley and foothill grassland on sandy substrates. Elevational range 60-800m.	February-May	Unlikely. Suitable habitat is not present on site.
Dudley's lousewort <i>Pedicularis dudleyi</i>	--	Rare	1B	Maritime chaparral, cismontane woodland, North coast coniferous forest, and valley and foothill grassland. Elevational range: 60-900m.	April-June	Unlikely. Suitable habitat is not present on site.
Santa Cruz mountains beardtongue <i>Penstemon rattanii</i> var. <i>kleei</i>	--	--	1B	Chaparral, lower montane coniferous forest, and North coast coniferous forest on sandy shale slopes. Elevational range: 400-1100m.	May-June	Unlikely. Suitable habitat is not present on site.
Monterey pine <i>Pinus radiata</i>	--	--	1B	Closed cone coniferous forest, cismontane woodland. Elevational range 25-185m.	Not applicable	Unlikely. Suitable habitat is not present on site.

Table 3.3-1

Special-status Plants That May Occur within the Proposed Project Area

Species	Federal	State	CNPS	Habitat Description	Bloom Period	Potential to Occur Within the Project Area
Yadon's rein orchid <i>Piperia yadonii</i>	FE	--	1B	Monterey pine forest and dwarf maritime chaparral; on sandy soils. Elevational range: 10-415m.	May-August	Unlikely. Suitable habitat is not present on site.
Hickman's cinquefoil <i>Potentilla hickmanii</i>	FE	SE	1B	Coastal bluff scrub, closed-cone coniferous forest; freshwater meadows, seeps, marshes, and swamps.	April-August	Unlikely. Suitable habitat is not present on site.
Pine rose <i>Rosa pinetorum</i>	--	--	1B	Closed cone coniferous forest. Elevational range: 2-300m.	May-July	Unlikely. Suitable habitat is not present on site.
Most beautiful jewel-flower <i>Streptanthus albidus</i> ssp. <i>peramoenus</i>	--	--	1B	Chaparral, cismontane woodland, valley and foothill grassland often on serpentinite. Elevational range: 110-1,000m.	April-June	Unlikely. Suitable habitat is not present on site.
Santa Cruz clover <i>Trifolium buckwestiorum</i>	--	--	1B	Margins of broadleaved upland forest, cismontane woodland, and coastal prairie. Elevational range: 105-610m.	April-October	Unlikely. Suitable habitat is not present on site.
Saline clover <i>Trifolium depauperatum</i> var. <i>hydrophilum</i>	FSC	--	1B	Marshes and swamps, vernal pools, valley and foothill grassland, often on mesic or alkaline sites. Elevational range: 0-300m.	April-June	Unlikely. Suitable habitat is not present on site.
Monterey clover <i>Trifolium trichocalyx</i>	FE	SE	1B	Sandy openings and burns in closed cone coniferous forest. Elevational range: 30-240m.	April-June	Unlikely. Suitable habitat is not present on site.

Source: CNDDDB 2002 and CNPS 2001.

Status:

Federal

FE Listed as endangered under the Federal Endangered Species Act (FESA)

FSC Species of concern as identified by the USFWS
State

SE Listed as endangered under the California Endangered Species Act (CESA)

ST Listed as threatened under the CESA

CSC Species of concern as identified by the CDFG

CNPS

1A Plant species presumed extinct in California

1B Plant species considered rare, threatened, or endangered in CA or elsewhere

2 Plant species that are rare, threatened, or endangered in CA, but more common elsewhere

3 Plant species that lack necessary information to assign them to a listing status

4 Plant species that have a limited distribution or that are infrequent throughout a broader area in CA, a watch list

Habitat Description:

In accordance with CNPS 2001

Occurrence on Site:

Possible: potentially suitable habitat is present on site and the site is within the known range of the species

Unlikely: not likely to occur on site due to a lack of suitable habitat on site, restricted range of the species, or other factors. The term "site" refers to all three locations of the project: Pajaro, Castroville, and Salinas.

Table 3.3-2

Special-status Wildlife Species That May Occur within the Proposed Project Area

Species	Federal	State	Habitat Description	Potential to Occur Within the Project Area
Invertebrates				
Mimic tryonia <i>Tryonia imitator</i>	FSC	--	Coastal lagoons, estuaries, and salt marshes.	Unlikely. Suitable habitat is not present within the project area.
California linderiella <i>Linderiella occidentalis</i>	--	--	Seasonal pools in unplowed grassland underlain by hardpan or sandstone.	Unlikely. Suitable habitat is not present within the project area.
Conservancy fairy shrimp <i>Branchinecta conservatio</i>	FE	--	Seasonal pools in unplowed grassland underlain by hardpan or sandstone.	Unlikely. Suitable habitat is not present within the project area.
Longhorn fairy shrimp <i>Branchinecta longiantenna</i>	FE	--	Seasonal pools in unplowed grassland underlain by hardpan or sandstone.	Unlikely. Suitable habitat is not present within the project area.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT	--	Seasonal pools in unplowed grassland underlain by hardpan or sandstone.	Unlikely. Suitable habitat is not present within the project area.
Ohlone tiger beetle <i>Cicindela ohlone</i>	FE	--	Inhabits clay or sandy soils, on coastal terraces supporting remnant patches of native grassland.	Unlikely. Suitable habitat is not present on site. The nearest known occurrence location is northwest of Soquel (USFWS 2001b).
Globose dune beetle <i>Coelus globosus</i>	FSC	--	Inhabits coastal sand dunes.	Unlikely. Suitable habitat is not present within the project area.
Smith's blue butterfly <i>Euphilotes enoptes smithi</i>	FE	--	Most commonly associated with coastal dunes and coastal sage scrub plant communities in Monterey and Santa Cruz counties. Host plants are two buckwheat species: <i>Eriogonum latifolium</i> and <i>E. parvifolium</i> .	Unlikely. Suitable habitat is not present within the project area.

Table 3.3-2

Special-status Wildlife Species That May Occur within the Proposed Project Area

Species	Federal	State	Habitat Description	Potential to Occur Within the Project Area
Monarch butterfly <i>Danaus plexippus</i>	--	--	Winter roost sites extend along the coast from northern Mendocino County to Baja California, Mexico. Roosts located in wind-protected tree groves (Eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	Unlikely. Stands of eucalyptus near the site could provide roosting sites; however, the project area is not a known winter roosting area.
Fish				
Steelhead – Central California Coast ESU <i>Oncorhynchus mykiss</i>	FT	--	From the Russian River, south to Soquel Creek and to, but not including, the Pajaro River. Also San Francisco and San Pablo Bay basins.	Unlikely. Suitable habitat is not present within the project area.
Steelhead – South-Central California Coast ESU <i>Oncorhynchus mykiss</i>	FT	--	All runs in coastal basins from the Pajaro River south to, but not including, the Santa Maria River.	Unlikely. Suitable habitat is not present within the project area.
Tidewater goby <i>Eucycloglobius newberryi</i>	FE	CSC	Prefers semi-closed estuaries or lagoons of coastal streams that are low in salinity.	Unlikely. Suitable habitat is not present within the project area.
Amphibians				
Santa Cruz long-toed salamander <i>Ambystoma macrodactylum croceum</i>	FE	SE	Ponds and wet meadows near sea level in a few restricted locales in Santa Cruz and Monterey counties. Aquatic larvae prefer shallow (<12 inches) water, using clumps of vegetation or debris for cover.	Unlikely. Suitable habitat is not present on site.

Table 3.3-2

Special-status Wildlife Species That May Occur within the Proposed Project Area

Species	Federal	State	Habitat Description	Potential to Occur Within the Project Area
California tiger salamander <i>Ambystoma californiense</i>	FT	CSC	Annual grasslands and grassy understory of valley-foothill hardwood communities in central and northern California. Requires underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	Unlikely. Suitable habitat is not present on site.
Arroyo toad <i>Bufo californicus</i>	FE	CSC DFG Protected	Washes, streams and arroyos mainly west of the desert from central California south to the Baja Peninsula	Unlikely. Suitable habitat is not present on site.
California red-legged frog <i>Rana aurora draytonii</i>	FT	CSC	Lowlands and foothills in or near permanent sources of water with dense, shrubby, or emergent riparian vegetation. Requires 11 to 20 weeks of permanent water for larval development. Access to aestivation habitat is also necessary.	Unlikely. Suitable habitat is not present on site.
Foothill yellow-legged frog <i>Rana boylei</i>	--	CSC	Partially shaded, shallow streams and riffles with a rocky substrate in a variety of environments.	Unlikely. Suitable habitat is not present within the project area.
Reptiles				
Black legless lizard <i>Anniella pulchra nigra</i>	--	CSC	Sand dunes and sandy soils in the Monterey Bay and Morro Bay regions. Inhabits sandy soil/dune areas with bush lupine and mock heather as dominant plants. Moist soil is essential.	Unlikely. Suitable habitat is not present within the project area.
Blunt-nosed leopard lizard <i>Gambelia sila</i>	FE	SE, DFG Fully Protected	Semiarid grasslands, alkali flats, and washes of the San Joaquin Valley and nearby valleys and foothills.	Unlikely. Suitable habitat is not present within the project area.

Table 3.3-2

Special-status Wildlife Species That May Occur within the Proposed Project Area

Species	Federal	State	Habitat Description	Potential to Occur Within the Project Area
Western pond turtle <i>Clemmys marmorata</i>	--	CSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams, irrigation ditches with aquatic vegetation. Requires basking sites and suitable (sandy banks or grassy open fields) upland habitat for egg-laying.	Unlikely. Suitable habitat is not present within the project area.
Southwestern pond turtle <i>Clemmys marmorata pallida</i>	--	CSC	Inhabits permanent or nearly permanent bodies of water in many habitat types. Requires basking sites such as partially submerged logs, vegetation mats, or open mud banks..	Unlikely. Suitable habitat is not present within the project area.
Birds				
Cooper's hawk <i>Accipiter cooperi</i>	--	CSC	Most commonly associated with dense stands of live oak, riparian deciduous or other forest communities near water.	Unlikely. Suitable habitat is not present on site.
White-tailed kite <i>Elanus leucurus</i>	FSC	FP	Low rolling foothills/valley margins with scattered oaks and river bottomlands or marshes adjacent to deciduous woodland. Open grasslands, meadows, or marshes are utilized for foraging. Isolated, dense-topped trees in close proximity to foraging areas are used for nesting and perching.	Unlikely. Suitable habitat is not present on site.
California clapper rail <i>Rallus longirostris obsoletus</i>	FE	SE	Salt-water and brackish marshes traversed by tidal sloughs in the vicinity of the San Francisco Bay.	Unlikely. Suitable habitat is not present within the project area.
Western snowy plover <i>Charadrius alexandrinus nivosus</i>	FT	CSC	Sandy beaches on marine and estuarine shores, salt pond levees, and shores of large alkali lakes. Sandy, gravelly, or friable soils are needed for nesting.	Unlikely. Suitable habitat is not present within the project area.

Table 3.3-2

Special-status Wildlife Species That May Occur within the Proposed Project Area

Species	Federal	State	Habitat Description	Potential to Occur Within the Project Area
Short-eared owl <i>Asio flammeus</i>	FSC	CSC	Typically nests in both fresh and salt swamp lands, lowland meadows, and irrigated alfalfa fields. Nests on dry ground in depression concealed in vegetation. Requires tule patches/tall grass for nesting and daytime seclusion.	Unlikely. Suitable habitat is not present within the project area.
Western burrowing owl <i>Athene cunicularia hypugaea</i>	FSC	CSC	Burrow sites occur in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. A subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Unlikely. Suitable habitat is not present on site.
Bank swallow <i>Riparia riparia</i>	--	ST	A colonial nesting species; nests primarily in riparian and other lowland environments. Requires vertical banks/cliffs with fine textured/sandy soils near streams, rivers, lakes, or ocean to dig nesting hole.	Unlikely. Suitable habitat is not present within the project area.
Tricolored blackbird <i>Agelaius tricolor</i>	--	CSC	Highly colonial species, most numerous in the Central Valley and vicinity. Requires open water, protected nesting substrate, and foraging areas with insect prey within a few kilometers of the colony.	Unlikely. Suitable habitat is not present on site.
Least Bell's vireo <i>Vireo bellii pusillus</i>	FE	SE	Dense willow-dominated riparian habitat with lush understory vegetation. The northernmost reported sighting in recent years is of a nesting pair of vireos near Gilroy.	Unlikely. Suitable habitat is not present on site.

Table 3.3-2

Special-status Wildlife Species That May Occur within the Proposed Project Area

Species	Federal	State	Habitat Description	Potential to Occur Within the Project Area
Mammals				
Salinas harvest mouse <i>Reithrodontomys megalotis distichlis</i>	--	--	Occurs in fresh and brackish water wetlands and probably adjacent uplands around the mouth of the Salinas River. Known only from the Monterey Bay Region.	Unlikely. Due to lack of suitable habitat within the project area and the restricted range of the species.
San Joaquin kit fox <i>Vulpes macrotis mutica</i>	FE	ST	Lower Sonoran life zone of the Mojave and Colorado deserts north to the San Joaquin Valley and Inner Coast Ranges and southeastern Oregon.	Unlikely. Suitable habitat is not present on site.
Southern sea otter <i>Enhydra lutris nereis</i>	FT	DFG Fully Protected	Coastal waters from Washington south to the Channel Islands of California, including the Monterey Bay region and Big Sur coast.	Unlikely. Suitable habitat is not present on site.

Source: CNDDDB 2002.

Status:

Federal

- FE Listed as endangered under the Federal Endangered Species Act (FESA)
- FT Listed as threatened under the FESA
- FC Candidate species for listing under the FESA
- PE Proposed for listing as endangered under the FESA
- PT Proposed for listing as threatened under the FESA
- D Species that has been delisted pursuant to the FESA
- FSC Species of concern as identified by the USFWS
- MB Migratory bird, protected in accordance with the Migratory Bird Treaty Act (MBTA)

State

- SE Listed as endangered under the California Endangered Species Act

(CESA)

ST Listed as threatened under the CESA

CSC Species of concern as identified by the CDFG

FP Listed as fully protected by the California Fish and Game Code

Habitat Description

In accordance with CNDDDB (2002)

Occurrence on Site:

Possible: potentially suitable habitat is present on site and the site is within the known range of the species

Unlikely: due to lack of suitable habitat on site, restricted range of the species, or other factors

The term "site" refers to all three locations: Pajaro, Castroville, and Salinas

Special Status Plants

One Special-status plant species, Congdon's tarplant, has the potential to occur on one of the three project sites, at Castroville. Three others have the potential to occur in the area but not on the three proposed sites. All four species are discussed below.

Congdon's Tarplant

Once regarded as a member of the group of sunflower family species known as spikeweeds and tarplants, Congdon's tarplant recently was put in its own genus, *Centromadia*. It is a prickly yellow-headed composite that has both ray and disk florets (unlike the yellow-headed, weedy, prickly sow thistle [*Sonchus asper*], stinkweed [*Dittricia graveolens*], and bristly ox-tongue [*Picris echioides*] plants which often grow side-by-side with it). The most distinctive feature of Congdon's tarplant is the bracts which subtend the flowering heads. These bracts or modified leaves, known as phyllaries, greatly exceed the yellow rays in length, and form a prickly crown around each flowering head.

According to the CNDDDB the known population of Congdon's tarplant nearest to the Castroville site is from Long Canyon NE of town. Plants were found there as recently as 1994. In 1998 plants were found along East Blanco Road between U.S. Highway 101 and the railroad main line. Salinas is a type locality based on an 1886 collection by the famous American botanist Asa Gray.

The species is known from a collection from Castroville made in 1909. The area was searched for plants in 1998 by a CNPS volunteer botanist, but none were found. Parsons biologists surveyed the sites in November 2002 and January 2005 but no plants were detected. Spring and summer preconstruction surveys are recommended.

Monterey Spineflower

The Monterey spineflower (*Chorizanthe pungens* var. *pungens*) is an herbaceous annual in the buckwheat family (Polygonaceae) that occurs on bare, sandy soils in maritime chaparral, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland (CNPS 2001). The current known range of this species extends from the Monterey Peninsula, Monterey County, northward along the coast to Day Valley near Soquel, southern Santa Cruz County, and inland to the Salinas Valley (USFWS undated).

The bloom period extends from April through June (CNPS 2001). Its elevational range extends from 10 to 1,500 feet (CNPS 2001).

This species is currently listed as threatened at the federal level and as a List 1B (plants rare, threatened, or endangered in California and elsewhere) species by the CNPS. Recognized threats to the species include urban development, recreational development and activities, agriculture, military activities, and invasion by non-native plants (CNPS 2001).

In 2002, the USFWS issued its final rule regarding designation of Critical Habitat for the Monterey spineflower (USFWS 2002b). The primary constituent elements of the designated critical habitat are: (1) sandy soils associated with active coastal dunes, coastal bluffs with a deposition of windblown sand, inland sites with sandy soils, and interior floodplain dunes; (2) plant communities that support associated species (coastal dune, coastal scrub, grassland, maritime chaparral, oak woodland, and interior floodplain dune communities) and have structural openings between the dominant vegetation elements; (3) no or little cover by non-native species that would compete for resources available for growth and reproduction of Monterey spineflower; and (4) physical processes such as occasional soil disturbance, that support natural dune dynamics along coastal areas. Critical habitat does not include existing features and structures, such as buildings, roads, aqueducts, railroads, airports, other paved areas, lawns, and other urban landscaped areas not containing one or more of the primary constituent elements. The Service designated 10 critical habitat units: four coastal sites and six inland sites where Monterey spineflower is known to occur (USFWS 2002b).

The species is known to occur in Santa Cruz County on coastal dunes and terraces (Sunset, Freedom, and Bel Mar) and in Monterey County on coastal dunes and terraces or inland sandy sites (Moss Landing, Marina, Asilomar, Prunedale, Fort Ord, Del Ray Oaks, and Soledad). While the species is not known from the vicinity of the proposed project site at Pajaro, it is found at Manresa State Beach to the west on coastal dunes, near Freedom and in Larkin Valley.

The project sites at Pajaro, Castroville, and Salinas are not within any of the designated habitat units for the species and the Monterey spineflower is thus not likely present there.

Robust Spineflower

The robust spineflower (*Chorizanthe robusta* var. *robusta*) is an annual herb in the buckwheat family that inhabits sandy or gravelly openings in cismontane woodland, coastal dunes, and coastal scrub (CNPS 2001). This species' current distribution is restricted to coastal and near coastal sites, extending from Pogonip Park in the City of Santa Cruz, southern Santa Cruz County, southeast to the coastal dunes at Sunset State Beach, northern Monterey County (USFWS 2002a).

Robust spineflower blooms from April through September (CNPS 2001). Its elevational range extends from 10 to 1,000 feet (CNPS 2001).

This species is currently listed as endangered at the federal level and as a List 1B species by the CNPS. There are currently only eight known populations in existence (USFWS 2002a). Recognized threats to the species include development, recreation, mining, and invasion by non-native plants (CNPS 2001).

At about the same time that critical habitat was designated by the USFWS for the Monterey spineflower, another species, the robust spineflower, was similarly treated (USFWS 2002a). The Service used the same criteria as above to select critical habitat for the robust spineflower, namely: (1) sandy soils associated with active coastal dunes, coastal bluffs with a deposition of windblown sand, inland

sites with sandy soils, and interior floodplain dunes; (2) plant communities that support associated species (coastal dune, coastal scrub, grassland, maritime chaparral, oak woodland, and interior floodplain dune communities) and have structural openings between the dominant vegetation elements; (3) no or little cover by non-native species that would compete for resources available for growth and reproduction of robust spineflower; and (4) physical processes such as occasional soil disturbance, that support natural dune dynamics along coastal areas. Critical habitat does not include existing features and structures, such as buildings, roads, aqueducts, railroads, airports, other paved areas, lawns, and other urban landscaped areas not containing one or more of the primary constituent elements. The Service designated critical habitat units at one coastal site and five inland sites where it is known to occur (USFWS 2002a).

The robust spineflower is not known from the vicinity of the Pajaro site but it is known from Manresa and Sunset State beaches just to the west and from the hills to the south. In addition, the species is known to occur on the Watsonville West USGS quad behind Aptos High School. None of the three project sites contain the primary constituent elements of critical habitat for spineflowers, and the robust spineflower is thus not likely present there.

Santa Cruz Tarplant

The Santa Cruz tarplant (*Holocarpha macradenia*) is an herbaceous annual of the sunflower family (Asteraceae) that often inhabits clay or sandy soils in coastal prairie, coastal scrub, and valley and foothill grasslands surrounding Monterey Bay. The species was once more widespread in the region, including San Francisco Bay as far north as Richmond (CNPS 2001; Hickman 1993).

The bloom period of this species extends from June through October (CNPS 2001). Its elevational range extends from 30 to 750 feet (CNPS 2001).

The Santa Cruz tarplant is listed as endangered at the State level, threatened at the federal level, and as a List 1B species by the CNPS. Recognized threats to the species include urbanization, agricultural operations, weeds, and lack of appropriate ecological disturbance (CNPS 2001).

While the species is not known from the area around the Pajaro or Castroville sites, it is recorded from several scattered localities nearby, including the Elkhorn Slough Preserve and Watsonville Airport. Santa Cruz tarplant does not occur on the project sites.

Special Status Animals

White tailed kite and western burrowing owl have the potential to occur on the Castroville project site. Three other Special-status animal species have the potential to occur in the area but not on the three proposed sites: Santa Cruz long-toed salamander, California tiger salamander, and California red-legged frog. All five of these species are discussed below.

Santa Cruz Long-toed Salamander

The Santa Cruz long-toed salamander (*Ambystoma macrodactylum croceum*) is listed as an endangered species at both the State and federal levels. This species is also designated as a fully protected species by the California Department of Fish and Game (California Fish and Game Code §5050).

This species is a relatively small salamander (2 to 3.25 inches), with long slender toes and yellow-orange dorsal blotches on a black back (Stebbins 1985).

The Santa Cruz long-toed salamander inhabits upland chaparral and woodland areas of coast live oak or Monterey pine (*Pinus radiata*) as well as riparian strips of arroyo willow (*Salix lasiolepis*) near suitable breeding ponds (USFWS 2002c). A significant portion of this species' life is spent underground in small mammal burrows, rock fissures, along the root systems of plants in upland chaparral and wooded areas, and occasionally human structures (Zeiner et al. 1988, USFWS 2002c).

Adult Santa Cruz long-toed salamanders depart their upland refuges in route to a breeding pond with the onset of the rainy season in mid- to late-November or December (USFWS 2002c). Vegetated drainages or swales are preferred as movement corridors; however, open areas are used on occasion. Migrations of up to one mile by this species have been documented, but most individuals remain within one-quarter mile of breeding ponds if suitable upland habitat exists (Ruth 1989). Breeding occurs from mid-January to mid-February. Eggs are deposited singly or in loose clusters on aquatic vegetation in shallow water (2 to 3.2 inches) below the surface (Anderson 1967, Zeiner et al. 1988). Aquatic larvae appear to prefer shallow water, less than 12 inches in depth (Zeiner et al. 1988). Following metamorphosis, terrestrial juveniles may spend their entire first summer in mammal burrows or beneath surface objects in close proximity to the breeding pond (Anderson 1967, Zeiner et al. 1988). The return migration of adults back to their upland refuge sites may occur immediately following breeding, or up to several weeks after breeding activities have ended (Zeiner et al. 1988).

Twelve Santa Cruz long-toed salamander breeding ponds have been documented in southern Santa Cruz and northern Monterey counties (CNDDDB 2002). Within Santa Cruz County, breeding has been documented at Valencia Lagoon, Ranch Reservoir, Ellicott, Seascape, Calabasas, Buena Vista, Green's, and Rancho Road ponds. In Monterey County breeding has been documented at McCluskey, Moro Cojo, and Bennett sloughs and the McCluskey vernal pool (HLA 1998, USFWS 2002c). The Castroville site is the only location within two miles of one of these identified sites. Moro Cojo slough is ½ mile north of the project site, and is separated from the project area by intensively cultivated agricultural fields. It is unlikely that salamanders would migrate from any of the known breeding locations to the project site.

California Tiger Salamander

The U.S. Fish and Wildlife Service listed the California tiger salamander (*Ambystoma californiense*) as a threatened species in its entire range on August 4,

2004. At the State level, this species is listed as a Species of Special Concern by the CDFG. Although five locations in Monterey County are proposed to be designated as critical habitat (USFWS 2004C), none is near any of the project sites.

The California tiger salamander is a large salamander that reaches lengths of 8 inches or more, with a broad rounded snout and small protruding eyes with black irises (Jennings and Hayes 1994). Coloration is primarily black with white or pale yellow spots or bars sparsely distributed over the entire body (Stebbins 1985). The belly is highly variable in pattern, ranging from almost entirely white or pale yellow to variegated white or pale yellow and black.

The range of California tiger salamander includes coastal regions from the vicinity of the San Francisco Bay south to Santa Barbara County. The known elevational range of this species extends from 10 feet to 3,458 feet (3 m to 1054 m) (Jennings and Hayes 1994).

Adult California tiger salamanders inhabit rolling grassland and oak savannah. Adults spend most of the year in subterranean retreats such as small mammal burrows, but may be found on the surface during migration to breeding sites. Preferred breeding sites include vernal pools and other temporary pools; however, permanent man-made ponds may be used if predatory fish are absent.

California tiger salamander adults begin migrating to ponds after the first heavy rains of fall and are found in or around the breeding ponds from approximately December 1st to February 15th (Zeiner et al. 1988). In extremely dry years, California tiger salamanders may not reproduce. After mating, females lay several small clusters of eggs, ranging from 1 to small groups of 2 to 4 (Jennings and Hayes 1994). The eggs are deposited on both emergent and submergent vegetation, as well as submerged detritus. Completion of larval development through metamorphosis requires approximately 10 weeks, at which time the larvae will normally weigh about 10 grams (Jennings and Hayes 1994). Long lasting, large temporary pools are required due to the species' long developmental interval (Jennings and Hayes 1994). Larvae able to remain in pools for a longer time period may grow to much larger sizes (Jennings and Hayes 1994). Following metamorphosis, juvenile California tiger salamanders migrate in mass at night from the drying breeding sites to refuge sites (Jennings and Hayes 1994). Prior to this migration, the juveniles spend anywhere from a few hours to a few days near the edge of the breeding site (Zeiner et al. 1988). Preliminary data suggest that most individuals reach sexual maturity at two years of age; however, some may take longer (Jennings and Hayes 1994).

Adult California tiger salamanders are largely opportunistic feeders, preying upon arthropod and annelid species that occur in burrow systems, as well as aquatic invertebrates found within seasonal pools.

The primary cause of decline in California tiger salamander populations is the loss of vernal pools and other ephemeral water bodies due to urban development and agricultural land conversions. Introduction of exotic and transplanted predatory fishes, such as mosquito fish (*Gambusia affinis*), and bullfrogs (*Rana*

catesbeiana) may also negatively affect this species through predation and/or competition.

Although California tiger salamanders are known from breeding ponds in the region, it is not likely that they would migrate from these ponds to the project sites for reasons similar to those noted above for the Santa Cruz long-toed salamander.

California Red-legged Frog

The California red-legged frog (*Rana aurora draytonii*) is a large brown to reddish brown frog that historically occurred in coastal habitats from the vicinity of Point Reyes National Seashore (Marin County), and inland from the vicinity of Redding (Shasta County), southward to northwestern Baja California, Mexico (Jennings and Hayes 1994, USFWS 2002c). The species has been extirpated from seventy percent of its historic range (USFWS 2002c). Though still common in the San Francisco Bay area and along the central coast, the remainder of the California red-legged frog's distribution has been reduced to isolated localities in the Sierra Nevada, northern Coast Range, and northern Transverse Range (USFWS 2002c).

The California red-legged frog inhabits a variety of aquatic, upland, and riparian environments, including ephemeral and permanent ponds, seasonal wetlands, perennial creeks, intermittent streams, manmade aquatic features, riparian corridors, blackberry (*Rubus discolor*) thickets, non-native annual grasslands, and oak savannahs (USFWS 2004a). This species appears to be capable of utilizing almost any aquatic system provided a permanent source of water, ideally lacking non-native predators, is nearby (Stebbins 1985, Jennings and Hayes 1994, USFWS 2004a). "The importance of riparian vegetation for this species is not well understood" (USFWS 2004a). The ability of this species to disperse relatively great distances (≥ 2 miles [~ 3 kilometers]), serves as an important key to its long-term survival, by enabling it to recolonize areas subjected to localized extinctions and colonize new or previously uncolonized areas (USFWS 2004a).

Breeding occurs during winter and early spring (late November through April) (Jennings and Hayes 1994, USFWS 1997). Following mating, the female attaches egg masses containing 2,000 to 6,000 eggs to emergent vegetation at or near the water's surface (Jennings and Hayes 1994, USFWS 1997). The embryos hatch within 6 to 14 days after fertilization, and the larvae typically complete metamorphosis between July and September, 3.5 to 7 months after the eggs were laid (Storer 1925, Jennings and Hayes 1994, USFWS 2002c). Sexual maturity is attained in 2 years by males and 3 years by females (Jennings and Hayes 1994, USFWS 2002c). Juveniles may be active both diurnally and nocturnally, while adults are highly nocturnal (Jennings and Hayes 1994).

California red-legged frog is listed as Threatened by the USFWS and is designated as a Species of Special Concern by the CDFG. Beginning with excessive exploitation (hunting and fishing) for the restaurant industry prior to the turn of the century, this species has been subject to a variety of pressures that have

resulted in its decline and disappearance over the majority of its historic range (Jennings and Hayes 1994). Other factors that have contributed to the decline of California red-legged frog include destruction of riparian habitat due to development, agriculture, or flood control practices, and the introduction of exotic predators such as bullfrogs, crayfish, and a variety of non-native fishes (Jennings and Hayes 1994).

On September 11, 2000, the USFWS proposed designation of critical habitat pursuant to the Endangered Species Act of 1973, as amended, for the California red-legged frog. On March 13, 2001, the USFWS released its final designation of critical habitat for the California red-legged frog (USFWS 2001a). This designation was challenged in court, and ultimately vacated by a consent decree, which required revisions to the designation of critical habitat. On April 13, 2004, the USFWS proposed a revised designation of critical habitat (USFWS 2004a).

“Critical habitat includes: (a) essential aquatic habitat; (b) associated uplands; and (c) dispersal habitat connecting essential aquatic habitat” (USFWS 2004a). All of the project sites are located in Critical Habitat Unit #17 for the California red-legged frog (USFWS 2004a). As described by USFWS, “Unit #17 consists of coastal drainages of southern Santa Cruz and northern Monterey Counties.”

White-tailed Kite

White-tailed kite (formerly known as black-shouldered kite) (*Elanus leucurus*) is fully protected under the California Fish and Game Code. Take of this species, including removal of an active nest or disturbance that results in abandonment of a nest, is prohibited.

The white-tailed kite occurs year-round in coastal and valley lowlands of California (Zeiner et al. 1990a). The species can be found in association with the herbaceous and open stages of a variety of environments, including open grasslands, meadows, emergent wetlands, and farm country (Kaufman 1996, Zeiner et al. 1990a). White-tailed kites feed primarily on small diurnal mammals, such as voles and house mice, with birds, insects, reptiles, and amphibians utilized to a lesser extent (Kaufman 1996, Zeiner et al. 1990a). Nests are constructed near the top of dense oaks, willows, or other tree stands that are located adjacent to foraging areas (Zeiner et al. 1990a). The breeding season extends from February to October, with peak activity occurring from May to August (Zeiner et al. 1990a). The CNDDDB currently contains no breeding records for this species within the project vicinity.

Western Burrowing Owl

The western burrowing owl (*Athene cunicularia hypugea*) is designated as a species of special concern by the CDFG, and is also protected under the Migratory Bird Treaty Act. The owl is small in size, with sandy coloring on the head, back, and upper parts of the wings and white-to-cream with barring on the breast and belly. Burrowing owls are found in open, dry grasslands, agricultural and range lands, and desert communities, often in association with burrowing animals. Burrowing owls may also be found at the margins of airports, irrigation

ditches, golf courses, and vacant urban lots. Burrowing owls are primarily crepuscular (active at dusk and dawn), but will hunt throughout a 24-hour period. Burrows created by ground squirrel or other small mammals are typically used for shelter and nesting.

Burrowing owl populations have declined throughout California as a result of habitat loss from agricultural conversion and urbanization, and from the secondary effects of ground squirrel poisoning programs.

The CNNDDB currently contains no occurrence records for this species within the immediate project vicinity. The nearest record occurs on the Moss Landing quadrangle and is located approximately 2 miles north of Castroville (CNDDDB 2002).

3.3.3 REGULATORY SETTING

Federal Endangered Species Act

The Federal Endangered Species Act of 1973 (FESA) recognized that many species of fish, wildlife, and plants are in danger of or threatened with extinction and established a national policy that all federal agencies should work toward conservation of these species. The Secretary of the Interior and the Secretary of Commerce are designated in FESA as responsible for identifying endangered and threatened species and their critical habitats, carrying out programs for the conservation of these species, and rendering opinions regarding the impact of proposed federal actions on endangered species. FESA also outlines what constitutes unlawful taking, importation, sale, and possession of endangered species and specifies civil and criminal penalties for unlawful activities.

Biological assessments are required under Section 7(c) of FESA if listed species or critical habitat may be present in the area affected by any major construction activity as defined in Part 404.02. Under Section 7(a)(3) every federal agency is required to consult with the USFWS or National Marine Fisheries Service on a proposed action if the agency has reason to believe that an endangered or threatened species may be present in an area affected by the proposed action and that implementation of the action will likely affect the species.

California Endangered Species Act

The California Endangered Species Act (CESA) (Fish and Game Code Sections 2050-2098) establishes State policies to conserve, protect, restore, and enhance any endangered species or any threatened species and its habitat. The Fish and Game Commission is charged with establishing a list of endangered and threatened species. State agencies must consult with the Department of Fish and Game to determine if a proposed project is likely to jeopardize the continued existence of any state-listed endangered or threatened species.

The California Fish and Game Code defines “take” (Section 86) and prohibits “taking” of a species listed as endangered or threatened under the California Endangered Species Act (California Fish and Game Code Section 2080) or as fully protected (as defined in California Fish and Game Code Sections 3511, 4700, 5050, and 5515). Impacts on

individuals of those species are considered significant if they result in the following effects: a) direct mortality; b) permanent or temporary loss of occupied habitat that would result in mortality to or reduced productivity of at least one individual of the species; c) avoidance of biologically important habitat for substantial periods resulting in mortality to or reduced productivity of at least one individual of the species.

California Fish and Game Code

Native Plant Protection Policy

The goals of the California Native Plant Protection Policy are as follows:

“The intent of the Legislature and the purpose of this chapter is to preserve, protect, and enhance endangered or rare plants of this state” (Section 1900). “As used in this Chapter, a ‘native plant’ means a plant that grows in a wild uncultivated state which is normally found native to the plantlife of this state” (Section 1901).

“The commission may adopt regulations governing the taking, possession, propagation, transportation, exportation, importation, or sale of any endangered or rare native plants. Such regulations may include, but shall not be limited to, requirements for persons who perform any of the foregoing activities to maintain written records and to obtain permits which may be issued by the department (Section 1907).

“No person shall import into this state, or take, possess, or sell within this state, except as incident to the possession or sale of the real property on which the plant is growing, any native plant, or any part or product thereof, that the commission determines to be an endangered native plant or a rare native plant, except as otherwise provided in this chapter (Section 1908).

“All state departments and agencies shall, in consultation with the department, utilize their authority in furtherance of the purposes of this chapter by carrying out programs for the conservation of endangered or rare native plants. Such programs include, but are not limited to, the identification, delineation, and protection of habitat critical to the continued survival of endangered or rare native plants” (Section 1911).

California Environmental Quality Act

CEQA Guidelines - Article 5, Section 15065

Article 5, Section 15065 of the CEQA Guidelines requires that a lead agency make mandatory findings of significance in an EIR if:

“The project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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.”

CEQA Guidelines – Section 15380

Rare or endangered species are defined in the CEQA Guidelines (Section 15380) as follows:

- “(a) ‘Species’ as used in this section means a species or subspecies of animal or plant or variety of plant.
- (b) A species of animal or plant is:
 - (1) ‘Endangered’ when its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors; or
 - (2) ‘Rare’ when either:
 - (A) Although not presently threatened with extinction, the species is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or
 - (B) The species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered “threatened” as that term is used in the Federal Endangered Species Act.
- (c) A species of animal or plant shall be presumed to be rare or endangered as it is listed in:
 - (1) Sections 670.2 or 670.5, Title 14, California Administrative Code; or
 - (2) Title 50, Code of Federal Regulations Sections 17.11 or 17.12 pursuant to the Federal Endangered Species Act as rare, threatened, or endangered.
- (d) A species not included in any listing identified in subsection (c) shall nevertheless be considered to be rare or endangered if the species can be shown to meet the criteria in subsection (b).”

Wetlands and Other Jurisdictional Waters of the United States

The CEQA Guidelines (1994) state that effects on the environment that conflict with adopted environmental plans or goals are normally regarded as significant. A “no net loss of wetland acreage or value” policy is established within both the state and federal executive branches (California Wetlands Conservation Policy 1993). Ditching, filling, or

other activities, which could alter the characteristic physical, chemical, biological, or public interest values (as defined by 40 CFR 230 Subparts C-F) associated with wetlands and other waters of the U.S. are considered impacts under U.S. Army Corps authority.

Placement of fill material in waters of the United States is regulated through Section 404 of the Clean Water Act (CWA), under jurisdiction of the U.S. Army Corps of Engineers (ACOE). The term “waters of the United States” as defined in Code of Federal Regulations (33 CFR 328.3[a]; 40 CFR 230.3[s]) includes:

1. All waters which are currently used, 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 interstate lakes, rivers, streams (including intermittent streams), mud flats, sand flats, 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 which are or could be used by interstate or foreign travelers for recreational or other purposes; or from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or which are used or could be used for industrial purposes by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under the definition;
5. Tributaries of waters identified in paragraphs (1) through (4);
6. Territorial seas; and
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (1) through (6).

The extent of the waters in streams is defined by elevations along the stream bank above which water normally does not rise (ordinary high water).

Wetlands are defined as areas that are saturated or inundated by surface or ground water for a frequency and duration sufficient to support the prevalence of plants adapted for life in saturated soil conditions (33 CFR §328 [(b)b]).

The federal definition of a wetland requires that three wetland identification parameters be met: hydrology, hydrophytic vegetation, and hydric soils must all be present. The U.S. Fish and Wildlife Service defines hydrophytic vegetation as: “plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content” (Cowardin et al. 1979). An area in which hydrophytes represent greater than 50 percent of the plant cover is considered to contain a predominance of hydrophytic vegetation. Hydric soils are defined by the Natural Resource Conservation Service as those soils that form under conditions of saturation, flooding, or ponding for long enough during the growing season that anaerobic conditions develop in the upper part of the soil profile.

Under a recent Supreme Court decision (Solid Waste Agency of Northern Cook County vs. U.S. Army Corps of Engineers) it was determined that Clean Water Act jurisdiction over waters of the United States does not extend to non-navigable, isolated, intrastate waters. This decision is commonly known as the SWANCC decision.

The goal of the Clean Water Act is to maintain, restore, and enhance the physical, chemical, and biological integrity of the Nation's waters. In reviewing proposed projects involving impacts to wetlands, the ACOE requires no net loss of wetland functions and values. Compensatory mitigation for unavoidable impacts to wetlands permitted by the ACOE requires replacement acreage, preferably in-kind and in the same watershed, sufficient to achieve the goal of no net loss. Replacement acreage is determined by the ACOE based on the functions and values of the area being filled, the functions and values of the proposed mitigation site, and the likelihood of success of the proposed mitigation. Wetland mitigation may include restoration, creation, and/or preservation. The mitigation must be based on the functions and values of wetlands that are affected and the local opportunities to utilize these three approaches. Compensation should be completed before or concurrent with the impact, as near to the site of impact as practicable, and the mitigation site must be protected from subsequent loss or degradation.

Waters of the State

Pursuant to the Porter-Cologne Water Quality Control Act (California Water Code, Division 7), the Regional Water Quality Control Boards of the state have jurisdiction over waters of the State. This jurisdiction covers waters that are no longer regulated as waters of the United States as a result of the SWANCC decision. The Regional Board now regulates activities in areas that are outside of the jurisdiction of the U.S. Army Corps of Engineers. These activities include any fill of isolated wetlands, vernal pools, or stream banks above the ordinary high water mark. Activities in waters of the State that lie outside the jurisdiction of the Corps require the issuance, or waiver, or waste discharge requirements from the Regional Board.

Regional Resource Planning Efforts

Several regional planning efforts that address protection of the diversity of biological resources have been undertaken in the area. This includes the mandates of the Coastal Zone Management Act through administration of the Local Coastal Program by the County of Monterey, which applies to the Castroville site, a part of the coastal zone. It also includes policies and regulations of the National Oceanic and Atmospheric Administration as they apply to the watersheds that drain into Monterey Bay.

The Monterey Bay National Marine Sanctuary and Elkhorn Slough National Estuarine Preserve are both located in the vicinity of the project area. The Castroville site is within the watershed of Elkhorn Slough, and the Union Pacific Railroad mainline crosses several arms of the slough. Several Habitat Conservation Plans are being implemented or are under consideration by federal and State regulatory authorities for the Monterey Bay region, but none apply directly to the present project. A summary of these efforts and applicable guidelines for natural resources protection is presented in Table 3.3-3.

Table 3.3-3

Summary of Regional Resource Planning Efforts

Jurisdiction	Program Name	Public/Private	Resource Protection Guidelines
National Oceanic and Atmospheric Administration (NOAA)	Monterey Bay National Marine Sanctuary Management Plan Water Quality Protection Program	Public	The Agriculture and Rural Lands Action Plan was developed in 1999 to address agricultural water quality issues related to the Sanctuary such as erosion control, nutrient runoff, and persistent pesticides.
NOAA	Elkhorn National Estuarine Reserve System Wide Monitoring Program	Public	Monitoring non-point pollution in runoff which flows into Elkhorn Slough.
County of Monterey	Environmental Resource Management Element (ERME)	Public	Composite of the basic resource elements in the Draft 21 st Century Monterey County General Plan applied to parcels mapped as “Ecologically Sensitive Areas.”
County of Monterey	North County Local Coastal Program	Public	The current enforceable Local Coastal Program from the 1982 Monterey County General Plan.
United States Fish & Wildlife Service (USFWS) ¹	Seascape Uplands Habitat Conservation Plan	Private	Allows residential construction and protection of habitat for the Santa Cruz long-toed salamander in southern Santa Cruz County.

Source: Parsons 2005.

¹Several federal grants have been recently issued by the USFWS for recovery, land acquisition, and conservation planning in the Monterey Bay region. These include grants to the Big Sur Land Trust for the City of Marina acquisition of coastal dune habitat, Santa Cruz long-toed salamander habitat acquisition in Larkin Valley, and Safe Harbor Agreement funding for protection of the Watsonville Slough watershed in southern Santa Cruz County.

General Plan Goals, Objectives, and Policies

The Monterey County General Plan written in 1982 is currently being updated but it has not yet been ratified by the Planning Commission and Board of Supervisors. Therefore, the 1982 Monterey County General Plan Goals, Policies, and Objectives were used together with the draft plan update for disclosure. Table 3.3-4 identifies the Monterey County General Plan’s goals, objectives, and policies that provide guidance for development in relation to biological resources in the project area. It also includes guidance from the City of Salinas General Plan (2002). This table also indicates which Biological Resources criteria are responsive to each set of policies.

Table 3.3-4

General Plan Goals, Objectives, and Policies
Biological Resources

Adopted Plan Document	Document Section	Document Reference	Goals and Policies	Relevant Evaluation Criteria
Monterey County 1982 General Plan	Natural Resources	Vegetation and Wildlife Habitats	Goal 7	1, 2, 3, 4, 5
Monterey County 1982 General Plan	Natural Resources	Environmentally Sensitive Areas	Goal 11	1, 2, 3, 4, 5
North County Land Use Plan (Local Coastal Program)	Resource Management	Environmentally Sensitive Habitats	Policy 2.3.2.1 Policy 2.3.3.A.1	1, 2, 3, 4, 5
City of Salinas 2002 General Plan	Conservation/Open Space Element	Goal COS-5 Ecological and Biological Resources	Policy COS-5.1 Protect and enhance the reclamation ditch etc.	1, 2, 3, 4, 5

Source: Parsons 2005.

3.3.4 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

Table 3.3-5 summarizes both the evaluation criteria and points of significance used to address potential impacts to biological resources. The California Fish and Game Code, NEPA, CEQA, FESA, CESA, and the Monterey County General Plan were used as supporting documentation in developing the evaluation criteria and points of significance. In addition, pertinent policies and databases from the CDFG and the USFWS were also considered.

Table 3.3-5

**Evaluation Criteria with Points of Significance
Biological Resources**

Evaluation Criteria	As Measured By	Point of Significance	Justification
1. Will the project cause loss of individuals or occupied habitat of endangered, threatened, or rare fish, wildlife or plant species ¹ ?	a. Number of individuals of a plant or wildlife species that would be lost b. Acres of occupied or designated critical habitat	a. Greater than 0 individuals b. Greater than 0 acres	FESA, CESA (Sections 2062 and 2067), CEQA (Article 5, Section 15065 and Appendix G), and California Native Plant Protection Act (CDFG Code Sections 1900-1913); Monterey County General Plan.
2. Will the project cause loss of individuals of CNPS List 2, 3, or 4 plant species?	Number of plant species or populations that would experience a loss of individuals	Greater than 15 percent of known occurrences or populations in Monterey County	CEQA (Article 5, Section 15065); Monterey County General Plan.
3. Will the project cause loss of active raptor nest sites or other breeding sites?	Number of active sites	Greater than 0 active sites	CEQA (Article 5, Section 15065), Fish and Game Code - (Section 3503.5); Monterey County General Plan.
4. Will the project cause permanent loss of sensitive wildlife habitat ² ?	Acres of sensitive wildlife habitat	Greater than 25 percent of each habitat type in Monterey County	CEQA (Article 5, Section 15065), Monterey County General Plan.
5. Will the project cause permanent loss of sensitive native plant communities?	Acres of sensitive native plant community lost	Greater than 0 acres	CEQA (Article 5, Section 15065; Appendix G), CDFG Interim Wildlife/Hardwood Management Guidelines (February 1, 1989), CDFG (CNDDDB 2000); Monterey County General Plan.
6. Will the project substantially block or disrupt major fish or wildlife migration or travel corridors ³ ?	Number of corridors substantially blocked or disrupted	Greater than 0 corridors	CEQA (Appendix G); Monterey County General Plan.

Table 3.3-5

Evaluation Criteria with Points of Significance
Biological Resources

Evaluation Criteria	As Measured By	Point of Significance	Justification
7. Will 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?	Number of plans under which a conflict would result	Greater than 0 plans	CEQA (Appendix G) Monterey County General Plan
8. Will the Project destroy wetlands or waters of the U.S. or waters of the State?	Acreage of permanent discharge to or placement of fill in potential jurisdictional wetlands or waters of the U.S.	Greater than 0 acre	Clean Water Act, 40 CFR 230 Section 404(b)(1) Guidelines, Corps, EPA, and State of California no net loss policies. Porter-Cologne Water Quality Control Act (California Water Code, Division 7) Monterey County General Plan

Source: Parsons 2005.

Notes:

CDFG California Department of Fish and Game
CEQA California Environmental Quality Act
CESA California Endangered Species Act
CNDDDB California Natural Diversity Data Base
CNPS California Native Plant Society
FESA Federal Endangered Species Act
USFWS United States Fish and Wildlife Service

¹Endangered, threatened, or rare is defined here as:

- federally listed endangered, threatened, or proposed plant or wildlife species;
- state listed endangered, threatened, or proposed plant or wildlife species or rare plant species;
- federal candidates for listing; and
- CNPS List 1B plant species.

²Sensitive wildlife are defined here as:

- wildlife designated as “species of special concern” by the CDFG or USFWS; and
- wildlife listed as “fully protected” in California.

³“Major corridor,” for purposes of the EIR, is defined as any habitat that serves as a movement corridor for entire populations of a given species, essential to completion of their life cycle.

3.3.5 METHODOLOGY

Initial reconnaissance-level biological surveys at the project sites were completed in November 2002. The site areas were revisited in January, 2005, to document the current status of the sites; it was confirmed that none of the sites had changed materially since the 2002 surveys. The purpose of the surveys was to characterize existing baseline conditions and to determine the presence or potential presence of special-status plants, wildlife, and plant communities. Prior to the survey all biological resources that could be potentially impacted by the project were identified through computer searches of CNDDDB *Rarefind*, the CNPS Inventory of Rare and Endangered Vascular Plants of California, and through consultation with the USFWS. CNDDDB and CNPS record searches were conducted in October 2002 for the Chittenden, Watsonville East, Watsonville West, Moss Landing, Prunedale, and Salinas U.S. Geological Survey (USGS) 7.5 minute quadrangle maps that include the project area.

3.3.6 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION MEASURES

IMPACT: BIO-1: Will the project cause loss of individuals or occupied habitat of endangered, threatened, or rare fish, wildlife or plant species?

Analysis: *Potentially Significant, LPA and Alternate Castroville Passenger Platform Site*

The proposed Project will not impact individuals or occupied habitat of endangered, threatened, or rare wildlife or plant species at the Pajaro Passenger Platform Site #1 and Salinas site areas. These sites are in commercial/industrial areas and have not suitable habitat for species of concern.

Castroville Passenger Platforms at Site #1 and Site #2 are close to identified occurrences of Congdon's tarplant, which could potentially occur in the ruderal habitat on site. If the plant is present at either site construction of facilities would likely eliminate the plant.

Mitigation: **BIO-1: Conduct floristically-based special-status plant surveys for Congdon's tarplant at Castroville sites and if found, redesign the project to avoid the plants or provide compensation and habitat restoration.**

A botanist shall conduct a round of special-status plant surveys to coincide with the bloom period for Congdon's tarplant on the Castroville sites as a specific provision of mitigation. The surveys shall be floristically based to follow the CNPS guidelines (Nelson 1987). If special-status plants are detected, CDFG rare plant protection measures and provisions of the

Native Plant Protection Act and CNPS guidelines shall be adopted as mitigation. Specific mitigation would entail:

- (i) The project will attempt avoidance of the Congdon's tarplant population, if detected, through design and reconfiguration, or if this is infeasible;
- (ii) Reduce impacts by moving projects away from sensitive areas or if this is infeasible;
- (iii) Create new Congdon's tarplant habitat through habitat restoration and transplantation of the seed bank to include fencing or staking and/or providing offsite compensation.

After

Mitigation: *Less than Significant*

Surveys to identify and, if possible, avoid any Congdon's tarplant on the Castroville sites would result in no impacts to the plant. If the plants are present and cannot be avoided, creation of new habitat for the plants would fully mitigate impacts. Because the plant is well-suited to ruderal disturbed habitats, transplanting populations to a new site is not difficult and is expected to be successful mitigation for any plants that may be present on site.

IMPACT: BIO-2: Will the project cause loss of individuals of CNPS List 2, 3, or 4 plant species?

Analysis: *Less than Significant, LPA and Alternate Castroville Passenger Platform Site*

The Project Alternatives will not cause loss of individuals of CNPS List 2, 3, or 4 plant species, because potential habitat is not present on the station sites.

Mitigation: No mitigation is necessary.

IMPACT: BIO-3: Will the project cause loss of active raptor nest or other breeding sites?

Analysis: *Less than Significant, LPA and Alternate Castroville Passenger Platform Site*

The Project Alternatives will not cause loss of active raptor nest or other breeding sites. Suitable nesting areas are not present at any of the station sites.

Mitigation: No mitigation is necessary.

IMPACT: BIO-4: Will the project cause a permanent loss of sensitive wildlife habitat?

Analysis: *Less than Significant, LPA and Alternate Castroville Passenger Platform Site*

The Project Alternatives will not cause a permanent loss of sensitive wildlife habitat because none is present at the station sites.

Mitigation: No mitigation is necessary.

IMPACT: BIO-5: Will the project cause a permanent loss of sensitive native plant communities?

Analysis: *No impact, LPA and Alternate Castroville Passenger Platform Site*

The Project Alternatives will not cause a permanent loss of sensitive native plant communities. The ruderal and agricultural habitat present at the station sites is not sensitive.

Mitigation: No mitigation is necessary.

IMPACT: BIO-6: Will the project substantially block or disrupt major fish or wildlife migration or travel corridors?

Analysis: *No impact, LPA and Alternate Castroville Passenger Platform Site*

The Project Alternatives will not substantially block or disrupt major wildlife migration or travel corridors. No wildlife migration corridors traverse the commercial and industrial area proposed as station sites. The project would not affect streams that provide migration corridors for fish.

Mitigation: No mitigation is necessary.

IMPACT: BIO-7: Will 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?

Analysis: *No impact, LPA and Alternate Castroville Passenger Platform Site*

Construction of station and platform sites in urbanized and agricultural areas is not expected to have any effect on the Monterey Bay Marine Sanctuary or Elkhorn Slough National Estuarine Preserve. None of the Habitat Conservation Plans that are currently being implemented or are under consideration by federal and State regulatory authorities for the Monterey Bay region apply directly to the project sites.

Mitigation: No mitigation is necessary.

IMPACT: BIO-8: Will the Project destroy wetlands or waters of the U.S. or waters of the State?

Analysis: *No impact, Alternate Castroville Passenger Platform Site*

No wetland resources are present at any of these sites.

Mitigation: No mitigation is necessary.

Analysis: *Potentially Significant, LPA*

The ditch along the west side of the Castroville Passenger Platform at Site #2 is a jurisdictional wetland, which could be affected during construction of station facilities.

Mitigation: **BIO-8: Avoid wetlands**

The project has been designed to avoid fill of wetlands associated with the ditch on the western edge of the site. Buildings and other infrastructure shall be sited to avoid wetlands. Wetlands shall be protected from trespass by fencing installed at a specified distance (e.g., 25 foot buffer) around the ditch and associated wetlands. Signs shall be posted that identify the area as a no-entry “environmentally sensitive area.” Project designs would provide a drainage system to prevent surface storm water or landscaping irrigation runoff from flowing into nearby wetlands areas, unless adequately filtered by new wetlands or grasslands.

After

Mitigation: *Less than Significant*

Because the ditch is on the edge of the Site #2 it is expected that avoidance of impacts is feasible and no impacts would occur.

3.3.7 CUMULATIVE IMPACTS

IMPACT: BIO-C1: Will the project have significant cumulative impacts to biological resources?

Analysis: *Less than Significant*

Because the project is located in developed areas and would only affect ruderal and agricultural habitats, impacts to biological resources are expected to be less than significant. Potential effects to sensitive species and wetlands are minimal and can be fully mitigated. The project is thus not expected to contribute to cumulative effects on biological resources in the project area.

3.3.8 CONCLUSION

The proposed project sites at Pajaro and Salinas would not result in significant impacts to biological resources. Implementation of the above-referenced mitigation measures would reduce any impacts to biological resources at the Castroville Platform Sites 1 and 2 to a less than significant level.

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3.4 CULTURAL RESOURCES

3.4.1 INTRODUCTION AND SUMMARY OF IMPACTS

This section discusses the project impacts on cultural resources related to disturbance of archaeological, historical, architectural, and Native American/traditional heritage resources. The section also addresses disturbance of unknown archaeological resources, as well as paleontologic resources (fossils). To provide a basis for this evaluation, the setting section describes broad periods of cultural history in the project area, including the prehistoric period.

A summary of cultural resources impacts and mitigation measures is presented below. Full analyses of the impacts are included in Section 3.4.6.

<i>IMPACT</i>	<i>SIGNIFICANCE BEFORE MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>SIGNIFICANCE AFTER MITIGATION</i>
CR-1: Will the project cause a substantial adverse change in the significance of historical resources as defined in Section 15064.5?	Significant.	CR-1: Adhere to the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR Part 68).	Less than significant
CR-2: Will the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	Significant	CR-2: Protect archaeological resources.	Less than significant
CR-3: Will the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	No impact	No mitigation necessary.	No impact
CR-4: Will the project disturb any human remains, including those interred outside of formal cemeteries?	Significant	CR-4: Protect human remains.	Less than significant
CR-C1: Will the project have the potential to have a cumulative impact on cultural resources?	No impact	No mitigation necessary.	No impact

3.4.2 ENVIRONMENTAL SETTING

Prehistory

Prehistoric land use within the proposed project area began at least 4,600 years ago, with small nomadic bands of foragers utilizing seashore and inland terrestrial resources. These foraging bands were probably predecessors of the Esselen people who occupied most of southern Monterey County at the time of European arrival. The subsistence strategy used by these individuals consisted of seasonal residential moves along a series of resource patches, gathering food and resources daily as they were encountered, with a return to the residential base at the days end (Breschini and Haversat 1980). Among the many resources exploited by these early inhabitants include mussel (*Mytilus californicus*), abalone (*Haliotis* sp.), urchin (*Strongylocentrotus* sp.), turban snail (*Tegula* sp.), limpet (*Acmaea* sp.), chiton (*Amphineura* sp.), plus fish and marine mammals. The terrestrial resources include deer, brush rabbit, black tailed jackrabbit, squirrels, wood rats, dogs or coyote and bobcats. The hunting implements used to procure these resources include, bow and arrow, spear, gill and dip nets, slings and a variety of clubs. The various plant and vegetal resources used by the residents of Monterey County include miners lettuce (*Claytonia perfoliata*), clover (*Trifolium* sp.), hairgrass (*Deschampsia* sp.), ryegrass (*Elymus* sp.), goosefoot (*Chenopodium* sp.), wild buckwheat (*Eriogonum* sp.), tule (*Scirpus* sp.), manzanita (*Arctostaphylos* sp.), oak (*Quercus* sp.), pine (*Pinus* sp.), buckthorn (*Ceanothus*), sunflowers (various plants in the family Asteraceae), willow (*Salix* sp.), and Coralline algae (*Bossiella* sp.) (Breschini and Haversat 2000).

Jones (1994 and 1995) perceives seven archaeological components on the Monterey Coast, these are as follows:

Millingstone Period, 6,400-5,500 years before present (B.P.) Similar to Milling Stone Horizon in Southern California, with a low frequency of flaked stone tools, particularly projectile points, and absence of mortar and pestle, as well as obsidian. Subsistence probably emphasized shellfish and small seeds.

Early Period, 5,500-2,600 B.P. This period includes continued use of milling slabs and handstones, as well as the introduction of mortars and pestles, stemmed and side notched projectile points. There was probably a reduced level of mobility, and fish and terrestrial game become more significant. There is greater use of flaked stone tools, and obsidian appears, documenting inter-regional trade. Otter bones appear, suggesting trade of otter pelts, perhaps in exchange for obsidian.

Middle Period, 2,600-1,000 B.P. Use of circular shell fish hooks parallels an increase in fishing, while most other artifacts remain similar to Early Period. There were significant increases in the richness, evenness, and diversity of the mammalian resources base from the Early Period. Inter-regional trade reached its peak, with obsidian at its highest level.

Middle/Late Transition, 1,000-700 B.P. Small leaf-shaped projectile points and hopper mortars appear, while other artifact styles persist. There is still an emphasis on fishing, but inter-regional trade may have broken down as there is significantly less obsidian. There apparently was still not permanent occupation of many coastal sites.

Late and Protohistoric, 700-230 B.P. This period is characterized by the proliferation of new sites, introduction of Desert Side-notched and Canalino/Coastal Cottonwood projectile points, small well made drills, Olivella Type E and steatite disk beads, and the persistence of Contracting Stemmed and side notched points in low frequencies. Dietary residues show that there was a terrestrial orientation, emphasizing black tailed deer. A new flaked stone technology was also introduced. There is an emphasis on inland site locations, and differentiation of site types. Inter-regional trade may have broken down as there is a striking lack of obsidian.

Historic, 230-150 B.P. This period depicts the use and trade of European designed articles, including the use and trade of glass beads. The mussel collecting returned to plucking characteristic of early periods as opposed to the stripping technique which had dominated for several thousand years. There is probably a very low remnant population at this time.

Ethnography

The project area is located in the ethnographic territory of the Ohlone/Costanoan Esselen Nation. The title Ohlone/Costanoan Esselen Nation is a name identified by cultural members; the name was chosen to represent the diversity of its individuals and to identify all members of the culture as they move toward United States federal government recognition. The Ohlone/Costanoan Esselen territory consisted of the area where the San Joaquin and Sacramento Rivers flow into the San Francisco Bay, the entire portion of modern San Francisco from the Golden Gate south to Point Sur, which lies immediately south of Monterey Bay, and inland to an unknown point. The geographic interior boundary of the Ohlone/Costanoan Esselens was the Diablo Mountain Range. The term Costanoan is linguistic; it designates a language family consisting of 8 languages (Levy 1978).

The basic Ohlone/Costanoan Esselen political organization consisted of one or more villages and a number of camps making up a tribelet. The tribelet consisted of familial or multifamily bands or groups located within a geographic area. Villages consisted of families and semi-permanent dwellings. Camps were located in areas where local resources could be readily exploited and processed. Physiographic features loosely defined tribelet territories. Tribelet leaders may have been male or female. The leadership role was inherited patrilineally usually from father to son; however, a female could become the leader if no male offspring of suitable age was present. Community approval of a leader was essential for the leadership succession. The leader relied upon the consensus of advisors and elders when making any major decisions (Levy 1978).

The Ohlone/Costanoan Esselens took advantage of the various resources their ecological territory provided. A main staple of the Ohlone/Costanoan Esselens was the acorn, which when ground can be utilized as flour to produce mush or bread. Four species of oaks produce acorns within the Ohlone/Costanoan Esselen area; the Coast Live oak (*Quercus agrifolia*) and valley oak (*Quercus lobata*) were the most abundant. Tanbark oak (*Lithocarpus densiflora*) was considered superior because of its whiter meal produced after grinding. California black oak (*Quercus kelloggii*) was also used. The nuts of buckeye (*Aesculus californica*) were made palatable after leeching and mixed with various berries into a mush. The nuts of California laurel (*Umbellularia californica*) and hazelnuts (*Corylus cornuta* var.) were also eaten. Seeds of many plants were roasted, including dock (*Rumex* sp.), tarweed (*Madia* sp.), chia (*Salvia columbariae*), gray pine (*Pinus sabiniana*), and holly leaf cherry (*Prunus ilicifolia*). Berries utilized included blackberries (*Rubus ursinus*), elderberries (*Sambucus* sp.), strawberries (*Fragaria* sp.), manzanita berries (*Arctostaphylos* sp.), gooseberries (*Ribes* sp., subgenus *Grossularia*), madrone berries (*Arbutus menziesii*), wild grapes (*Vitis californica*) and toyon berries (*Heteromeles arbutifolia*) (Levy 1978).

Hunting was a mainstay of Ohlone/Costanoan Esselen populations. The large animals eaten included black tailed deer, Roosevelt elk, antelope, grizzly bear, mountain lion, sea lion, and whale. Smaller animals included dog, raccoon, brush rabbit, cottontail, jackrabbit, wood rat, mouse and mole. Waterfowl were the most important birds utilized by the Ohlone/Costanoan Esselens. Species included Canada goose (*Branta canadensis*), snow goose (*Chen caerulescens*), white fronted goose (*Anser albifrons*), American widgeon (*Anas americana*), pintail (*Anas acuta*), mallard (*Anas platyrhynchos*), green winged teal (*Anas crecca carolinensis*) and American coot (*Fulica americana*). Other birds eaten include morning dove (*Zenaida macroura*), robin (*Turdus migratorius*), California quail (*Lophortyx californicus*), and various hawks.

The Ohlone/Costanoan Esselen Nation is currently in the process of reaffirming its status as an American Indian tribe with the Bureau of Indian Affairs through the Federal Acknowledgement Process administered by the Branch of Acknowledgement and Research (www.esselelnation.com).

History

Spanish Period

By the middle of the sixteenth century, Spain had emerged as the premier naval and military power in Western Europe, with colonies in North and South America and a network of trading interests throughout the Pacific. Spanish colonies on the North American continent were administered from present-day Mexico City, the capital of the viceroyalty of New Spain. Exploration of California was driven by the steady northward march of empire, rumors of wealth ripe for plunder, and the search for the Strait of Anián (the Northwest Passage), the fabled deep-water passage through North America to the riches of the Far East.

The Portuguese-born sailor Juan Rodríguez Cabrillo made landfall at San Diego Bay in 1542 and is credited with being the first European discoverer of California. Probably the first European to see Monterey Bay was Sebastián Rodríguez Cermeño, who saw the bay in 1595 on his voyage along the California coast in search of a northern port for Spanish trading vessels. The first European to enter Monterey Bay and make landfall was the merchant trader Sebastián Vizcaíno, who sailed into the bay December 1602 and named it for the viceroy of Mexico, the Condé de Monterey. Vizcaíno's glowing reports of Monterey Bay and the detailed charts and logs he produced greatly influenced later Spanish exploration and colonization of California.

Shortly after Vizcaíno's voyage, the authorities in Mexico had concluded that excursions into California were not worth the effort and expense. In 1606 a royal order prohibited further exploration of California. The Pacific Coast of North America was declared a possession of Spain, a claim that would go unchallenged until the middle of the nineteenth century.

By the 1760s Spain was forced to reevaluate its policy of neglect towards the empire's northwestern frontier. The region had become increasingly vulnerable to foreign penetration—namely by Britain, France, and Russia, all of whom were steadily expanding their possessions in North America. In 1765, the Spanish government ordered that a colony be established in Alta (upper) California.

The Spanish colonization of California was achieved through a program of military-civilian-religious conquest. Under this system soldiers secured areas for settlement by suppressing Indian and foreign resistance and established fortified structures (presidios) from which the colony would be governed. Civilians established towns (pueblos) and stock-grazing operations (ranchos) that supported the settlement and provided products for export. The missionary component of the colonization strategy was led by Spanish priests, who were charged with converting Indians to Catholicism, introducing them to the benefits of Spanish culture, and disciplining them into a productive labor force. Ultimately, four presidios and 21 missions were established in Spanish California between 1769 and 1821.

The founding of Alta California began with a sea and land expedition that departed from Mexico in 1769. The sea expedition consisted of three ships carrying soldiers and colonists from Mexico. The land contingent was led by the military commander Gaspar de Portolá, who was joined by father Junípero Serra, the spiritual leader of the expedition. Facing enormous hardships along the way, including scores of deaths resulting from illness and Indian resistance, the sea and land parties eventually arrived at San Diego. Choosing to leave Serra behind to care for the ill, Portolá and small party of soldiers set off in search of Monterey Bay, which was to be the location of the northernmost presidio and mission. Portolá and his men arrived at Monterey months later but failed to recognize the bay so enthusiastically described by Vizcaíno. The expedition continued northward, at one point stopping at a stream the soldiers named "Pajaro" for a

grass-stuffed bird they found nearby at an abandoned Indian village. The party eventually arrived at San Francisco Bay but failed to recognize the significance of their discovery. Exhausted by the journey, the party returned to San Diego.

A second expedition, with Portolá traveling by land and Serra by sea, located Monterey Bay in 1770. In accordance with his orders, Portolá founded a presidio and the Mission San Carlos Borroméo. Before relinquishing his command and returning to Mexico, Portolá proclaimed Monterey the capital of California

In 1771, Serra moved the Mission San Carlos Borroméo from its location near the coastal presidio to the Carmel River. The relocated mission became Serra's headquarters for the founding of the missions of California. Two more missions were founded in Monterey County during the Spanish period: Mission San Antonio de Padua, founded in 1771 in the San Antonio Valley, and the Mission Nuestra Señora Dolorosísima de la Soledad, founded in 1791, 30 miles southeast of Monterey. Gradually father Serra and his successors overcame many of the difficulties of converting the local Indians, eventually training them to construct irrigation ditches, cultivate crops, and perform numerous other forms of industrial labor to support the colony.

After the initial difficulties of establishing a viable settlement, the colonial capital at Monterey became the center of social, political, and economic life in Spanish California. Supply ships from Mexico brought settlers and provisions necessary to expand the new settlement, and cattle were driven up from Mexico and served as the breeding stock for generations of future herds. Monterey Bay also became an important port of trade and a destination for many notable visitors and foreign dignitaries. By the 1790s, trade barriers imposed by Spain had been lifted, and vessels and whaling ships from America, China, and other countries began arriving at Monterey Bay to trade with the colonists. The resultant economic growth contributed to the emergence of wealthy elite of Spanish and California-born families that became the engine of economic and political growth in the Monterey region and beyond. To increase its hold on northern California, Spain granted generous tracts of land to these favored families, which included the Vallejos, the Castros, the Soberanes, the Berryessas, the Bernals, and the Alvarados.

By the beginning of the nineteenth century, however, the growth of Monterey and Spanish California had come to a halt. Embroiled within the Napoleonic wars and a subsequent struggle to throw off French rule, Spain was unable to effectively rule its North American colonies. Internal unrest in Mexico developed into full-blown revolution in 1810, and Spanish California became an impoverished backwater of a dying colonial empire (Hoover et al. 1990; Rice et al. 1996).

Mexican Period

In 1822, after more than a decade of revolutionary struggle, Mexico achieved independence from Spain, and California became a distant outpost of the Mexican

Republic. Under the federal constitution adopted in 1824, territorial government in California was administered by a governor appointed by the Mexican government. The governor's authority was weakened, however, by a shortage of troops necessary to enforce laws and provide civil order. As a result, real authority in California rested largely with a small number of landed families. The majority of these *ranchero* families were California-born, and most were entwined by intermarriage. Political life among this ruling elite was characterized by factional rivalries and sectional conflict. Hostilities among the rancheros rarely escalated into violence, as disputes were most often settled through bloodless artillery duels. In the absence of effective civil government, these mock battles, or "revolutions," served as a primitive system of checks and balances in the remote Mexican territory.

The issue during the Mexican period that had the greatest enduring effect on the future of California was the secularization of the missions. Under a law adopted by the Mexican congress in 1833, the mission lands were to be subdivided into land grants to be sold to trustworthy citizens. About 500 land grants were issued in California during the Mexican period. The maximum permissible size for ranchos was about 50,000 acres, or 76 square miles. Rooted in the republican ideology of human equality, the secularization order also specified that Indians were to receive half of the former mission lands. However, most Indians never learned that they were entitled to the lands, and the few that did receive allotments were unable to retain them for more than a few years. Nearly every aspect of the division of mission lands into ranchos was characterized by informality and a lack of proper planning, including the establishment of grant boundaries without the aid of surveying instruments. This rather loose approach to land policy would have dire consequences during the early years of the American period, as scores of land claims were tied up in lengthy and expensive court battles.

Although wheat was cultivated and sheep and horses were raised, the rancho economy was based primarily on stock raising for the hide and tallow trade. Cattle were driven to coastal locations where they were slaughtered and skinned; the hides and tallow (a product made from animal fat and used to make soap and candles) were then processed for transport to awaiting trade ships. Most of the labor on the ranchos was performed by former mission Indians, who worked almost entirely for food and shelter. The abundance of cheap Indian labor contributed to a reluctance among the rancheros to work and to an emphasis on relaxation and pleasure-seeking. Rancho society was characterized by frequent colorful celebrations, weddings, and the primary social event of the rancho era: the annual rodeo, where the rounding up of cattle was accompanied by several days of feasting, singing, dancing, and dazzling displays of horsemanship. Despite the frequently romanticized depictions of the era, Mexican California was fraught with political and economic troubles that would contribute greatly to its demise (Bean and Rawls 1983; Rice et al. 1996).

Land Grants in the Proposed Project Area

The proposed site for the Salinas Station is located on Rancho Nacional, one of 32 land grants awarded in the Salinas River Valley, a fertile region coveted by a succession of Spanish, Mexican, and American settlers. Rancho Nacional occupied land that is now the southern portion of the City of Salinas (the northern portion of Salinas lies on the former Rancho Sausal). During the Spanish period this land was one of the *ranchos del rey*, (property owned by the King of Spain) and was used for grazing cattle and other stock animals belonging to the presidio and the Mission San Carlos Borroméo at Carmel. In 1839, the Mexican government granted the 2-league (approximately 9,000 acres) Rancho Nacional to Vicente Cantua, a former administrator of Mission Soledad. Cantua obtained a U.S. patent of 6,633 acres in 1866 (Clark 1991; Hoover et al. 1990; U.S. Surveyor General 1886).

The proposed site for the Castroville Station is located on Rancho Bolsa Nueva y Moro Cojo. This rancho originally consisted of two grants: Bolsa Nueva was granted to Francisco Soto in 1829 and 1836, and Moro Cojo was granted in three parts (1825, 1836, and 1837) to Simeon Castro, who eventually combined the two properties. Simeon Castro was the son of Macario Castro, who arrived in California in 1784. The City of Castroville was founded in 1864 by Simeon Castro's son Juan Castro and is situated within the southwestern portion of Rancho Bolsa Nueva y Moro Cojo. In 1873, Rancho Bolsa Nueva y Moro Cojo was patented Simeon Castro's widow, María Castro. With roots tracing back to Spanish California, the Castros were one of California's most prominent early families, with landholdings stretching from San Francisco Bay to Santa Barbara (Clark 1991; Fink 1978; Hoover et al. 1990; U.S. Surveyor General 1872).

The proposed site for the Pajaro Station is located on Rancho Bolsa de San Cayetano, granted to Don Ignacio Vicente Ferrer Vallejo in 1824. The 2-league grant was bordered on the west by Monterey Bay, on the north by the Pajaro River, on the east by Rancho Vega del Rio del Pajaro, and on the south by the Carneros Rancho. An accomplished soldier in Spanish California, Don Ignacio was the forefather of the Vallejos, a leading California family with extensive landholdings and political influence. Among his thirteen children were José de Jesus Vallejo, the grantee of an enormous rancho in Alameda County, and Mariano Vallejo, the illustrious military commander for Mexican northern California. The elder Vallejo constructed an adobe on his property that came to be known as the "Glass House" for the many glass windows that enclosed its upper porch. Attempts to restore this first home of the Vallejo family were unsuccessful, and the remains were bulldozed in 1926 (Clark 1991; Fink 1978; Hoover et al. 1990; U.S. Surveyor General 1859).

American Period

The absence of effective governmental authority in Mexican California invited infiltration by outsiders. As early as the 1820s, British and American mountain

men, fur traders, and entrepreneurs were venturing into California in search of fortune. The Mexican government was unable to halt the incursion and granted citizenship to foreigners who pledged to adhere to Mexican law. Many of the foreigners received generous land grants on which they established grazing and commercial operations — such as the vast New Helvetia rancho granted in 1839 to John Sutter in what is now Sacramento. Within a short period of time the outsiders came to dominate commercial life in California, thereby posing a challenge to Mexican control of the region.

Beginning in the early 1840s, Mexico's hold on California was further threatened by the steady overland migration of American settlers into the region. The increased American presence in California was a product of the expansionist impulse that had come to dominate the American imagination and which contributed to a deterioration of relations between Mexico and the United States. These tensions were exacerbated in 1842 when the commodore of the U.S. Pacific squadron, Thomas ap Catesby Jones, having heard a rumor that war had broken out, sailed four ships into Monterey Bay and demanded the surrender of the province. Genuine war between the U.S. and Mexico broke out in May 1846, and many decisive battles in this conflict took place in California. The United States eventually prevailed, and the American victory over Mexico was formalized in February 1848 with the Treaty of Guadalupe Hidalgo, under which the United States ceded from Mexico the present states of California, Nevada, Utah, New Mexico, Arizona, and parts of Wyoming and Colorado.

In January 1848, just a few days before the treaty was signed, James Marshall, an employee of John Sutter, discovered gold on the American River. Marshall's discovery triggered the gold rush, a massive influx of fortune-seekers into California which led to the creation of major cities such as San Francisco, Sacramento, and Stockton, as well as numerous smaller settlements and towns in and around the gold-bearing regions of the Sierra Nevada foothills. The sudden and enormous growth of California's population brought about by the gold rush resulted in a movement for statehood that culminated in the state constitutional convention at Monterey in 1849 and the establishment of California as a state in 1850.

The gold rush was only the beginning of California's transformation from a remote backwater of the Mexican Republic to one of the most populous states in the union. By 1852 the most accessible gold diggings had been exhausted, and most of the immigrants that had come to California in search of instant fortune began to redirect their energies to agricultural and commercial development. During the two decades that followed the gold rush, California's urban and agricultural infrastructure grew steadily as migration into the state continued at a solid pace.

The gold rush and its immediate aftermath brought comparatively modest growth to Monterey County, which was formed in 1850 as one of California's original 27 counties. While other areas of the state experienced significant change in terms of

population increase and expansion of the built environment, the Pajaro and Salinas valleys retained an essentially quiet agrarian character, with cattle grazing, sheep raising, wheat cultivation, and dairying being the chief industries. These industries were strengthened by the introduction of improved breeds of livestock; more effective farming implements such as ploughs, seeders, and mechanical threshers; and modernized dairying equipment.

The success of the agrarian industries brought gradual population growth and the beginnings of urban construction. In 1856 Elias Howe of Boston purchased 80 acres of Rancho Sausal from Jacob Leese. On this property he built the Halfway House tavern that became the nucleus of the town of Salinas, which by the 1860s had become the center for stock raising and wheat and barley production in Monterey County. The town of Castroville was laid out in 1864 and developed around the industries of grain, and alfalfa, and sugar beet production, eventually specializing in the cultivation of artichokes for which it is presently renowned. In 1868 Pajaro consisted of a village of about 60 people just south of the town of Watsonville, an agricultural settlement in present Santa Cruz County. Each of these settlements experienced tremendous change with the arrival of rail transportation, which created and defined the urban transportation corridor that comprises the present study area (Clark 1991; Hoover et al. 1990; Johnston 1977).

Upon completion of the transcontinental railroad in 1869, the executives of the Central Pacific Railroad (the line that formed the western portion of the transcontinental route) turned their attention to the completion of a line between San Francisco and San Diego. Congressional land grants for the line had been obtained by the Southern Pacific Railroad, an organization formed in 1865 and which by 1870 had come under the control of the Central Pacific. The Southern Pacific entered Monterey County in 1871, when the railroad was extended from Gilroy to Pajaro. In 1872 the line was extended to Castroville and Salinas.

The stations at Castroville and Pajaro each underwent name changes. Castroville Station was renamed Del Monte Junction by the Southern Pacific in 1911, but this name was eventually dropped due to objections that the station was not properly identified with the town of Castroville, whose businesses benefited from rail passengers and commerce. The station at Pajaro was renamed Watsonville Junction in 1913, but the town in which it was situated remained Pajaro.

By 1904 Monterey County was linked to Los Angeles and San Francisco via Southern Pacific's Coast Division, a collection of integrated coastal railroads—including the line from Pajaro to Salinas—that had been consolidated under the Southern Pacific. The arrival of the railroad had a profound impact on Monterey County, as farm industries flourished with the region's linkage to state, national, and even global markets via the coastal and transcontinental routes. Salinas Valley agricultural products shipped to market included cereals, beans, orchard products, condensed milk, and sugar from the town of Spreckels, four miles southwest of Salinas and home to the largest sugar refinery in the world.

A second great inducement for regional growth was the advent of railroad car refrigeration, which allowed for the shipping of lettuce, broccoli, artichokes, and other types of produce grown in abundance in the Salinas and Pajaro valleys. Both the Salinas and Watsonville stations had icing facilities, which involved the moving of cars from the mainline to ice decks.

Rail transportation increased significantly following the outbreak of World War II and the establishment of Fort Ord, Camp McQuaide, and Camp Roberts, all of which used the railroads to transport troops, supplies, and armored equipment. Increased wartime rail traffic necessitated improved facilities, which led to the construction in 1942 of the present Spanish Colonial railroad station at Salinas, which now serves as an Amtrak station (Hamman 1980; Seavy 1998; Thompson and Signor 2000).

Historic Architectural Structures in the Project Area

The project sites were evaluated to determine whether there were historic architectural structures within the boundaries of the site itself, or if there were structures within a 1,000-foot viewshed of the project boundary. Facilities within the viewshed are evaluated because they contribute to the historic integrity of the overall area. A summary of the historic architectural structures in the project area is presented below. A more detailed description of the findings are included in the Cultural Resources Technical Report in Appendix C.

Pajaro Passenger Station at Site #1 (Watsonville Junction)

Within the project site is the Pajaro Passenger Station and a tool shed (Table 3.4-1). The passenger station was constructed in 1942 as a replacement to the original Southern Pacific Station that was built in the 1870s. The tool shed was built in 1910. The existing station incorporated Moderne style architecture. However, the structure is in poor condition, and currently is used for storage and Watsonville Yard support operations. Additional buildings and structures 50 years and older, located in the view shed are listed in Table 3.4-2. All of these buildings were evaluated and none were determined to be eligible for the National Register of Historic Places (NRHP).

Table 3.4-1				
List of Structures Within the Pajaro Project Site				
Reference No.	Parcel No.	Address	Type of use	Year built
1	117-272-001	Lewis Road	SP Watsonville Junction Passenger Station	1942
2	117-272-001	Lewis Road	SP Tool House	1910

Source: Parsons, 2005.

Table 3.4-2				
List of Structures in the Pajaro Viewshed				
Reference No.	Parcel No.	Address	Type of use	Year built
1	117-262-001	12 Lewis Road	Residential	1905
2	117-262-002	16 Lewis Road	Residential	1905
3	117-262-004	24 Lewis Road	Residential	1905
4	117-262-005	26 Lewis Road	Residential	1905
5	117-262-006	28 Lewis Road	Residential	1905
6	117-262-007	34 Lewis Road	Residential	1905
7	117-262-008	40A Lewis Road	Residential	1905
8		40B Lewis Road		
9	117-262-015	44 Lewis Road	Residential	1980
1	117-261-003	119 Railroad Avenue	Residential	1905
2	117-281-016	107 Railroad Avenue	Residential	1905
3	117-281-015	105 Railroad Avenue	Residential	1905
4	117-281-014	103 Railroad Avenue	Residential	1905
4	117-281-011	97 Railroad Avenue	Residential	1905
5	117-281-010	95 Railroad Avenue	Residential	1905
6	117-281-009	93A Railroad Avenue	Residential	1905
7	117-281-008	91A Railroad Avenue	Residential	1905
8	117-281-007	89A Railroad Avenue 89B Railroad Avenue	Residential	1905
9	117-281-006	87 Railroad Avenue	Residential	1962
10		85 Railroad Avenue	Residential	1885
1	117-301-001	430A Salinas Road 430B Salinas Road	Residential	1885 1905
2	117-301-002	430E Salinas Road	Residential	1875
4	117-281-005	436 Salinas Road	Residential	1880
5	117-271-011	Salinas Road 498 Salinas Road	Warehouses Industrial	1910
6	117-271-002	500 Salinas Road	Commercial	1962
7				
8	117-271-004	538 Salinas Road	Multi-Family Residential	1915
	117-271-006	540 Salinas Road	Residential	1900
		596 Salinas Road	Commercial	1945

Source: Parsons, 2005.

Castroville Passenger Platform at Site #2

There are no buildings and structures within the proposed Castroville site #2 project site that are 50 years and older. Only one structure (Castroville overhead pedestrian bridge) identified as 50 years and older is located in the viewshed and is listed in Table 3.4-3. The bridge consists of a protective metal cage attached to the concrete structure of the pedestrian footbridge over State Highway 156. The pedestrian overpass provides travel between the residential areas to the north and south of the highway. The overhead pedestrian bridge was recorded in 1999 as site # P-27-22909. This structure was nominated to the NRHP and was determined ineligible.

Table 3.4-3				
List of Structures in the Castroville Site #2 Viewshed				
Reference No.	Parcel No.	Address	Type of use	Year built
	P-27-2290	Highway 156	Castroville Overhead Bridge	

Source: Parsons, 2005.

Castroville Passenger Platform at Site #1

There are no buildings and structures within proposed Castroville Site # 1 or within the viewshed that are 50 years and older.

Salinas Layover Yard Facility at Site #2 and Intermodal Transportation Center

The buildings and structures within the proposed Salinas site that are 50 years and older are listed in Table 3.4-4. Buildings and structures, 50 years and older, located adjacent to the site in the viewshed are listed in Table 3.4-5. These structures were evaluated, and the following are considered potentially eligible for the NRHP: the Salinas Southern Pacific Passenger Station, the Southern Pacific Freight Station, the Railway Express Agency (REA) Building, and the Southern Pacific Steam Engine and Caboose. All of these structures are located within the project site. None of the structures within the viewshed were determined to be eligible.

Table 3.4-4

List of Structures in the Salinas Project Site

Reference No.	Parcel No.	Address	Type of use	Year built
1	002-171-33	Railroad Avenue	Southern Pacific Freight Station Depot	1872
2	002-171-25	40 Railroad Avenue	Southern Pacific Railroad Station	1942
3	002-171-31	Railroad Avenue	Southern Pacific REA Building	1919
4		Railroad Avenue	Southern Pacific Locomotive & Caboose ⁽¹⁾	1886
5		Railroad Avenue	Harvey-Baker Residence ⁽¹⁾	1886
6	002-171-13	64-68 W. Market St.	Pasquale Maida Commercial	1935
7	002-171-05	42-28 W. Market St.	El Aguila Bakery Commercial	1937
8	002-171-10	50 W. Market St.	Used Furniture Commercial	1928
9	002-171-10, 002-171-11	52 W. Market St.	Blacksmith Shop Commercial	1908
	002-171-012	58 W. Market St	American Supply Co. Commercial	1935

Source: Parsons, 2005.

(1) These structures were relocated to this site in the 1990s as part of creating the ITC.

Table 3.4-5

List of Structures in the Salinas Site Viewshed

Reference No.	Parcel No.	Address	Type of use	Year built
1	002-171-010	52 W. Market St.	Auto Service Shop Commercial	1940
	002-171-011	54 W, Market St.	Residential	1905
	002-171-012	58 W. Market St	American Supply Co. Commercial	1935
2	002-171-013	64 W. Market St.		
3	002-171-014	102 W. Market St.		
4				
5	002-031-014	11 Happ Place 11 Happ Place 11 Happ Place	Warehouse Warehouse Warehouse	1961 1961 1875
	002-031-015	8 Happ Place	Residential	1905
	002-031-015	7 Happ Place	Residential	1905
6	002-031-016	134 W. Market St.	Single-Family Residential	1905
	002-031-017	138 W. Market St.	Single-Family Residential	1950
	002-031-017	140 W. Market St.	Single-Family Residential	1950
	002-031-018	142 W. Market St.	Single-Family Residential	1905
	002-031-013	144 W. Market St.	Single-Family Residential	1910
	002-031-012	148 W. Market St.	Single-Family Residential	1910
	002-031-010	7 Vale Street	Commercial	1905
	002-031-011	11 Vale Street	Warehouse Warehouse Warehouse	1871
	002-031-009	210 W. Market St.		
	002-031-008	216 W. Market St		
	002-031-008	220 W. Market St	Single-Family Residential	

Table 3.4-5				
List of Structures in the Salinas Site Viewshed				
Reference No.	Parcel No.	Address	Type of use	Year built
	002-031-007	222 W. Market St.	Single-Family Residential	1900
	002-031-006	224 W. Market St, 224AW. Market St.	Single-Family Residential	1905

Source: Parsons, 2005.

Paleontology

Paleontological resources include fossil specimens, fossil sites, and fossil-bearing rock units. Vertebrate fossils are generally considered to be significant because their occurrence is relatively rare. Invertebrate and plant fossils and microfossils tend to occur in much greater abundance than vertebrate fossils. Non-vertebrate fossils are generally ranked with low significance unless they are in short supply, they are age-diagnostic, or the paleoenvironmental framework is unique (EIP 1990). Generally, fossils are not considered to be significant if they are found in large numbers and/or over a large geographic area (Reynolds 1988).

The project area lacks known fossil-containing rock formations and does not contain any significant paleontological localities (Monterey County Draft General Plan, Map ER-11).

Description of Proposed Project Sites

Pajaro Passenger Platform at Site #1 (Watsonville Junction)

The Pajaro site is located in an area considered to have a high degree of archaeological sensitivity (Monterey County Draft General Plan, Map ER-10). However, no known or previously recorded archaeological resources are present at the site. The entire project area was subjected to reconnaissance archaeological survey. The area consists of the historic railroad depot and buildings and is paved with little to no bare ground surfaces where archaeological sites could potentially be identified. As noted above, none of the structures on or near the site is considered eligible for the NRHP.

Castroville Passenger Platform at Site #2

Castroville Platform Site #2 is located in an area considered to have a high degree of archaeological sensitivity (Monterey County Draft General Plan, Map ER-10). No known or previously recorded archaeological or historical resources are present at the site; however, one previously recorded cultural resource

(Castroville Overhead Bridge) is within the project area. This structure is not eligible for the NRHP.

The project site consists of open agricultural fields. Though the ground visibility was excellent during the field investigation, the upper portion of the agricultural fields has been highly disturbed and no additional archaeological resources were recorded during the pedestrian survey. A previously recorded shell midden within ½ mile of the project area suggests that Native American populations utilized the sloughs and drainages adjacent to the project area.

Castroville Passenger Platform at Site #1

Castroville Platform Site #1 is located in an area considered to have a high degree of archaeological sensitivity (Monterey County Draft General Plan, Map ER-10). However, no known or previously recorded archaeological resources are present at the site. The entire project site was subjected to pedestrian survey and no new cultural resources were identified.

Salinas Layover Yard Facility at Site #2 and Intermodal Transportation Center

The Salinas site is the location of an historic railroad freight building complex. The following are considered potentially eligible for the NRHP: the Salinas Southern Pacific Passenger Station, the Southern Pacific Freight Station, the REA Building, and the Southern Pacific Steam Engine and Caboose. The passenger station is currently in use as the Salinas Amtrak Station. The freight station building is the original Southern Pacific standard-design freight house, built in 1872; the freight station is not in service. The REA Building was built in 1919. The steam locomotive engine and wood caboose are sited parallel to the tracks between the Amtrak Station and REA building.

One archaeological site was previously been identified; the apparent remains of an historic privy or trash deposit was discovered during construction of a parking lot in the project area. Very little bare ground is present at the site, but surface reconnaissance of the site did not identify additional archaeological resources.

3.4.3 REGULATORY SETTING

California Register of Historical Resources

Public Resource Code Section 5024.1 authorizes the establishment of the California Register of Historical Resources (CRHR). Any identified cultural resources must be evaluated against the CRHR criteria. In order to be determined eligible to the CRHR, a property must be significant at the local, state, or national level under one or more of the following four criteria, modeled after the NRHP criteria:

1. It is associated with events or patterns of events that have made a significant contribution to the broad patterns of the history and cultural heritage of California and the United States;
2. It is associated with the lives of persons important to the nation or to California's past;
3. It 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; or
4. It has yielded, or may be likely to yield, information important to the prehistory or history of the state and the nation.

In addition to meeting one of the above criteria, a significant property must exhibit a measure of integrity. Properties eligible for listing in the CRHR must retain enough of their historic character or appearance to be recognizable as historic properties and to convey the reasons for their significance. Integrity is judged in relation to location, design, setting, materials, workmanship, feeling, and association. It must also be judged with reference to the particular criteria under which a property is thought to be eligible.

Further, Public Resources Code (PRC) Section 5031 identifies a historical property as being the first, last, only, or most significant historical property of its type in the region.

Section 106 of National Historic Preservation Act

In the context of a federally reviewed and permitted project, the significance of archaeological resources is measured by the NRHP criteria; these criteria, by which NRHP eligibility of historic properties is judged "indicate what properties should be considered for protection from destruction or impairment" (36CFR60.2). Any action as part of an undertaking, that would affect significant cultural resources is subject to review and comment under Section 106 of the National Historic Preservation Act of 1966. Historic properties and archaeological sites that are listed or eligible for listing, in the NRHP must be preserved or otherwise managed in accordance with the regulations of the Advisory Council on Historic Preservation (36CFR800). Insignificant cultural remains usually do not require management consideration unless they possess other quality covered by NEPA. CEQA Guidelines for managing historically significant resources (Section 15064.5[a]) are generally complied with by meeting the Section 106 requirements.

Guidelines for specific strategies for the treatment of archaeological resources are presented in the Secretary of the Interior's Standards and Guidelines for Archaeological Documentation (48FR33734-44737). Mitigation programs for addressing potential impacts shall be prepared within that context, based on specific finds, circumstances and potentials for NRHP eligibility.

The Secretary of the Interior's Standards for the Treatment of Historic Properties is the directive for providing advice on the preservation and protection of all cultural resources listed in or eligible for listing in the NRHP. The Standards apply to all resources types, including buildings, sites, structures, objects, and districts. They address four treatments:

(1) Preservation, (2) Rehabilitation, (3) Restoration, and (4) Reconstruction. The treatment Standards, developed in 1992 and codified in 1995 (Federal Register Vol. 60, No. 133) as 36 CFR Part 68, replaced the 1978 and 1983 versions. The Standards and Guidelines are intended only as a general guidance for work on any historic property, but are regulatory for projects receiving federal grant-in-aid funds (Weeks 1995).

The Standards are intended to provide guidance prior to treatment. While the treatment Standards are designed and applicable to all historic resource types included in the NRHP – buildings, sites, structures, districts, and objects – the Guidelines are specific for resource types. Therefore, it is recommended that advice of qualified historic professions experienced in working with historic property be obtained early in the planning stage of the project. Special requirements or work that must be done to meet accessibility requirements, health and safety code requirements, or retrofitting to improve energy efficiency must be addressed. Although usually not part of the overall process of protecting an historic property, this work must also be assessed for its potential impact on the cultural resource.

The Guidelines pertain to both exterior and interior work on historic buildings, structures of all sizes, materials, and types and are consistent with The Secretary of the Interior's Standards for the Treatment of Historic Properties. The guidelines address each of the four treatments: Preservation, Rehabilitation, Restoration, and Reconstruction.

- Preservation Standards requires retention of the greatest amount of historic fabric, along with the building's historic form, features, and detailing as they have evolved over time.
- Rehabilitation Standards acknowledge the need to alter or add to a historic building to meet continuing or new uses while retaining the building's historic character.
- Restoration Standards allow for the depiction of a building at a particular time in its history by preserving materials from other periods.
- Reconstruction Standards establish a limited framework for re-creating a vanished or non-surviving building with new materials, primarily for interpretive purposes.

Of the four treatments, only rehabilitation includes an opportunity to make possible an efficient contemporary use through alterations. The architectural materials and features important in defining the building's historic character must be retained in order to preserve that character; protecting, maintaining, repairing, and replacement where warranted with the least degree of intervention possible. Some exterior and interior alterations to a historic building are generally needed to assure its continued use, but it is important that such changes do not radically change, obscure, or destroy character-defining spaces, materials, features, or finishes.

Paleontological Resources

California PRC, Section 5097.5, prohibits the excavation or removal of any “vertebrate paleontological site, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands.” Public lands are defined as lands owned by or under the jurisdiction of the state or any city, county, district, authority, or public corporation. Any unauthorized disturbance or removal of archaeological, historic, or paleontologic materials or sites located on public lands is considered a misdemeanor.

General Plan Policies

Table 3.4-5 identifies goals, objectives, and policies that provide guidance for development in relation to cultural and paleontological resources in the project area. The table also indicates which evaluation criteria are responsive to each set of policies.

Table 3.4-5

General Plan Goals, Objectives, and Policies Cultural Resources

Plan Document	Document Section	Document Reference	Policies	Relevant Evaluation Criteria
Monterey County 1982 General Plan	Archaeological Resources	Goal 12 Policy 12.1.3	All proposed development, including land divisions, within high sensitivity zones shall require an archaeological field inspection prior to project approval	2
Monterey County 1982 General Plan	Archaeological Resources	Goal 12 Policy 12.1.6	Where development could adversely affect archaeological resources, reasonable mitigation procedures shall be required prior to project approval	2
Monterey County 1982 General Plan	Archaeological Resources	Goal 12 Policy 12.1.7	All available measures, including... consideration of reasonable project alternatives...shall be explored to avoid development on sensitive archaeological sites.	2
Monterey County 1982 General Plan	Historic Preservation	Goal 52 Policy 52.1.3	The County shall work with property owners to mitigate the destruction or alteration of historic resources by zoning identified historic sites as “HR” ... either at the time of requests for demolition or alteration of the resource or at the time of mutual agreement between the County and property owner to preserve that historic resource.	1

Table 3.4-5

General Plan Goals, Objectives, and Policies
Cultural Resources

Plan Document	Document Section	Document Reference	Policies	Relevant Evaluation Criteria
Monterey County 1982 General Plan	Historic Preservation	Goal 52 Policy 52.1.6	The County shall ... provide funds for the restoration and enhancement of historic resources.	1
Salinas 2002 General Plan	Conservation/ Open Space Element, Cultural Resources	Goal COS-4 Policy COS-4.1	When historic buildings are renovated to extend their useful lives, the historic architecture should be maintained when possible.	1
Salinas 2002 General Plan	Conservation/ Open Space Element, Cultural Resources	Goal COS-4 Policy COS-4.4	Protect significant archaeological resources in accordance with the California Environmental Quality Act.	2

Source: Monterey County 1982.; City of Salinas 2002.

3.4.4 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

Cultural Resources

CEQA Section 15064.5 includes provisions for significance criteria related to archaeological and historical resources. A significant archaeological or historical resource is defined as one that meets the criteria of the CRHR. A significant impact is characterized as a "substantial adverse change in the significance of a historical resource."

An impact is considered to be significant if it meets any of the following criteria:

- the project may disturb historical architectural resources;
- the project may disturb known prehistoric or historic cultural resources; or
- the project may disturb buried, unknown prehistoric or historic archaeological resources.

Paleontology

The significance of paleontologic resources is evaluated using state and federal guidelines. CEQA guidelines indicate that a project could have a significant effect on the environment if project activities disrupt or adversely affect a paleontologic site (CEQA Checklist, Appendix G).

According to standard procedures published by the Society of Vertebrate Paleontology (1991), sedimentary rock units with a high potential for containing significant nonrenewable paleontologic resources are those within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present (Society of Vertebrate Paleontology 1991). Significant paleontologic resources are fossils or assemblages of fossils, which are unique, unusual, rare, uncommon, diagnostically or stratigraphically important, and those which add to an existing body of knowledge in specific areas, stratigraphically, taxonomically, or regionally (Reynolds 1988).

The following significance criteria were used to evaluate cultural resource impacts associated with the proposed Project (Table 3.4-6).

Table 3.4-6

Evaluation Criteria with Point of Significance
 Cultural Resources

Evaluation Criteria	As Measured by	Point of Significance	Justification
1. Will the project cause a substantial adverse change in the significance of historical resources as defined in Section 15064.5?	Number of sites affected by project facilities	Greater than 0 sites	Monterey County General Plan CEQA Section 15064.5; PRC Section 5020-5024, 21084.1
2. Will the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	Site locations in areas of high archaeological sensitivity.	Greater than 0 anticipated locations	Monterey County General Plan CEQA Section 15064.5; PRC Section 5020-5024, 21084.1
3. Will the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	Underground construction within geologic units with the potential to contain important fossils	Greater than 0 occurrences	Monterey County Draft General Plan CEQA, Appendix G; PRC Section 5097.5

Table 3.4-6

Evaluation Criteria with Point of Significance
 Cultural Resources

Evaluation Criteria	As Measured by	Point of Significance	Justification
4. Will the project disturb any human remains, including those interred outside of formal cemeteries?	Number of sites affected by project facilities	Greater than 0 sites	CEQA Section 15064.5; PRC Section 5020-5024, 21084.1

Source: Parsons 2005.

3.4.5 METHODOLOGY

Records Search

The goal of the cultural resources study for this project was to identify prehistoric and historic archaeological sites, architectural and historical sites, historic landscapes, and traditional cultural properties (including Native American heritage resources) that might be affected by implementation of the project.

The study used the definitions for prehistoric and historic archaeological sites in National Register Bulletin 15 (*How to Apply the National Register Criteria for Evaluation*, National Park Service 1991), for historic landscapes in Preservation Briefs 36 (*Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes*, Birnbaum 1994), and for traditional cultural properties in Bulletin 38 (*Guidelines for Evaluating and Documenting Traditional Cultural Properties*) and CRM 16 (*Traditional Cultural Properties: What You Do and How We Think*, Parker 1993).

Records and literature searches of the project area were conducted on January 25, 2005 at the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) at Sonoma State University, Rohnert Park, California, by NWIC staff. The area reviewed for the record search encompassed a ¾-mile radius surrounding each of the three project sites: Pajaro, Castroville and Salinas. In addition, the following local, state, and federal cultural resource inventories were reviewed:

- The National Register of Historic Places (<http://www.nr.nps.gov/>), accessed on November 10, 2002, lists no properties located within the project areas.
- The Historic Properties Data File for Monterey County October 13, 2002, lists no properties within the project area.
- The California Points of Historical Interest, 1992, of the Office of Historic Preservation, Department of Parks and Recreation, lists no properties within one-half mile radius.

- The California Historical Landmarks, 1990, of the Office of Historic Preservation, Department of Parks and Recreation, lists no properties located within any of the project areas.

Historical maps were reviewed in order to identify architectural and historical archaeological properties. Historic atlases, maps and notes were investigated at the Bureau of Land Management Map Room located at the Federal Building in Sacramento, California. Additional historic topographic maps were investigated at the Caltrans library map room in Sacramento, California. Contributing histories and newspaper articles used to develop the historical overview and to develop strategies for identifying historic properties were investigated at the California State Library located in Sacramento, California. Additional research was conducted at the California State University, Sacramento Library.

Native American Consultation

Parsons Senior Archaeologist, Steven M. Hilton contacted the Native American Heritage Commission (NAHC) on October 7, 2002. Mr. Hilton requested that the NAHC conduct a search of their sacred land files for presence of Native American cultural resources. It was also requested that any background information about prehistoric, historic or contemporary Native American land use within the project areas be identified. The final request was for a list of local Native American individuals and groups that may have knowledge of land use within the project areas.

The NAHC replied on October 11, 2002. The search of sacred land files failed to indicate the presence of Native American cultural resources within the project areas. The NAHC also provided a list of 14 Native American individuals or groups that may have knowledge of Native American land use within the project area.

Each of the Native American groups or individuals were sent a letter and project area maps requesting any information they may have regarding Native American land use of the project area. Each letter was sent registered mail and all letters were delivered and received by the addressed recipient. One response was received from the Esselen Nation on December 2, 2002. This letter stated that The Esselen Nation is concerned about all projects within their aboriginal homeland and are very interested in the project and concerned that cultural resources may be discovered during construction. A follow-up phone conversation on December 15, 2003 between Steven M. Hilton and Rudy Rosales, Cultural Resources and Tribal Chairperson for the Esselen Nation, was conducted. During this phone conversation it was discussed that if any cultural resources were discovered during construction the Esselen nation would be notified, and before any further construction would commence a qualified archaeologist would be consulted to verify the significance of the archaeological materials.

Field Methods

The entire project area was subjected to a reconnaissance survey for archaeological and historic architectural resources. Areas that were identified during the reconnaissance

survey to have either visible ground surface or any visible ground or possible soil that may contain archaeological resources were subjected to intensive pedestrian survey. An intensive pedestrian survey was conducted utilizing linear transects spaced less than 20 meters apart. Less than 70 percent of the project area contained areas where soil or bare ground was visible. Over 30 percent of the project area is built/paved environment with no visible ground surface other than roads or buildings.

All architecture located within the project areas was documented and photographed. All of the architecture within the project areas was assessed to determine build dates based upon the Monterey County Assessor's Office, October 30-31, 2002. All pictures, maps and field notes were examined in the field and laboratory to assess original build dates and historic significance.

Paleontology

Existing paleontologic and geological sources were reviewed (Monterey County 2004, Society for Vertebrate Paleontology 1991; California Division of Mines and Geology, 2003; 1992).

3.4.6 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION MEASURES

IMPACT: CR-1: Will the project cause a substantial adverse change in the significance of historical resources as defined in Section 15064.5?

Analysis: *Significant*; LPA and Alternate Castroville Site

Review of the previously evaluated and documented properties confirms the eligibility of the Southern Pacific Station buildings at the Salinas ITC site for the NRHP. The Pajaro station buildings have been determined to not be eligible for listing on the NRHP, and because the structures are in poor condition, which affects the historic integrity of the buildings, it is feasible to remove the buildings (Parsons, 2005). There are no historic resources at the Castroville site. In addition, the proposed project will not affect any historic structures that are identified within the immediate vicinity of either the Pajaro or Castroville sites.

Design Option 17 and Design Option 18, Site Plan A (hereafter called 17A and 18A) at the Salinas ITC propose to remodel an existing unused freight building for intercity bus passenger and other transit support operations. Design Option 17/18 Site Plan B (17B and 18B) would not use the freight building for intercity bus operations. Under Option 17B/18B the freight building is still expected to be remodeled by the City of Salinas. Under Option 17B/18B intercity bus parking would not be located at the freight building, but would instead be provided between the freight building and the existing Amtrak Station building. The freight building would be reused for some other commercial use, which has not yet been determined.

The Salinas Southern Pacific Freight Depot is located along the northern boundary of the project area. This structure is recommended as eligible for inclusion in the NRHP as part of the proposed federal undertaking because it is "...associated with events that have made a significant contribution to the broad patterns of our history."

Options 17A and 18A would require the remodeling and expansion of the freight depot, a one-story, wood-framed, rectangular building, approximately 5,000 square feet in size. Remodeling efforts as part of the project would include the following:

- The newer horizontal wood siding and the asbestos siding would be removed. The vertical 12-inch wide siding would be removed, inspected for termite damage, and reused where needed on the north, east and west end elevations.
- The ramped concrete loading dock would be removed.
- Roofing materials would be replaced as needed, and the widened roof overhang would be restored to its original dimensions with wood braces replaced to match those on the north side elevation. The flat roof would be removed.
- The opening in the east gable end would be restored and the added door would be removed. The original smaller freight door opening would be restored.
- All doors and vertical siding on the north elevation would be inspected for damage, replaced as needed with salvaged materials from the south elevation, and refinished. Siding and doors on the south elevation would be removed and salvaged.
- Interior partitions would be removed and the opening to the exterior restored. Missing roof truss members would be replaced.
- The north elevation wooden loading dock is in disrepair and would be removed. The south elevation loading dock was extended for motor trucking purposes, but would be removed and salvaged for reuse at the adjacent train exhibit and/or REA building, and potentially for portions of the Caltrain loading platform to be located along the north side of the freight building.
- The elevation of the interior floor would be lowered to grade level to allow reuse of the building for intercity bus operations, passenger waiting and Americans with Disabilities Act (ADA) accessibility.

Options 17B and 18B would also include remodeling of the freight building, with most of the same proposed changes described above being implemented. However, with this option bus loading would not take place within the south façade of the building. To reuse the building for other commercial use, the building would likely require addition of new heating, ventilating and air conditioning systems, plus additional plumbing and electrical facilities.

Mitigation: **CR-1: Adhere to the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR Part 68).**

The historic character of the Salinas Freight Depot will be retained and preserved by implementation of the Secretary of the Interior's Standards for the Treatment of Historic Properties. The following mitigation measures shall be implemented at the Salinas site:

- Photo documentation of the restoration/rehabilitation process, and
- A preservation architect shall be present on site to supervise the actual process and construction.

After
Mitigation

Less than Significant

The integrity of the freight station will be preserved by the removal of previous alterations and restoring the building to its original form while rehabilitating the building for reuse. In fact, the majority of the original building elements have actually been protected by the addition of the asbestos and wood siding to the south and east elevations. Additions and "updates" such as the extended deck and roof on the south elevation, the concrete loading dock and metal roof on the west gable end, and interior partitions have not permanently altered or destroyed the integrity of the building (Parsons, 2005).

Lowering the floor to street level would facilitate the reuse of the building on site. Options 17A and 18A would continue the original function of "moving and layover," but of passengers instead of freight. Lowering the floor would address ADA requirements required on new construction and/or building renovations and utilize original materials for needed building repairs.

Under Options 17B and 18B the reuse of the building has not been determined, but it is expected that the building would be preserved and restored by the City of Salinas.

IMPACT: CR-2: Will the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Analysis: *Significant; LPA and Alternate Castroville Passenger Station Site*

The Pajaro site and both Castroville sites are located in areas of high sensitivity for archaeological resources. Previous construction uncovered an historic trash scatter during parking lot construction in Salinas. There is a prehistoric shell midden with ½ mile of Castroville Site #2. There is, therefore, the possibility that archaeological resources not identified during the review of records will be encountered during construction or operation/management of the project. A potential to impact previously undiscovered archaeological resources thus exists. Cultural resources could consist of, but not be limited to, artifacts of stone, bone, wood, shell, or other materials, or features, including hearths, structural remains, or dumps. This is a potentially significant impact unless mitigated.

Mitigation: **CR-2: Protection of Archaeological Resources**

It is recommended that a qualified archaeological monitor be present during initial phases of ground disturbing activities at each of the three project areas. A qualified archaeological monitor can ensure that if any subsurface archaeological deposits are encountered during construction related activities, that the find can be evaluated and it can be determined if the find has the potential to meet the criteria established in the CRHR and NRHP.

Construction personnel shall be made aware of indicators of cultural resources and shall report any encounters. In the event that buried cultural resources are discovered during the course of project activities, construction operations shall immediately stop in the vicinity of the find and TAMC shall consult with the appropriate local, state, or federal entities and a qualified archaeologist to determine whether the resource requires further study. The archaeologist would consult with the State Historic Preservation Officer (SHPO) and, if the resource is prehistoric, the Native American Most Likely Descendent to determine the nature of the resource, its integrity and potential for NRHP eligibility.

If previously undiscovered significant (NRHP-eligible) resources are unearthed during construction they shall be avoided if possible. If avoidance is not possible, TAMC shall pursue data retrieval through excavation. All archaeological work on NRHP eligible and potentially-eligible properties shall be conducted in accordance with *Treatment of Archaeological Properties: A Handbook* (ACHP 1990) and *Archaeology and Historic Preservation: the Secretary of the Interior's Standards and Guidelines* (48FR44716-44742). Mitigation programs for addressing potential impacts shall be prepared within that context, based on specific finds, circumstances and potentials for NRHP eligibility. Specific field

methodologies shall be developed for specific resources within the context of a research design/ treatment plan. Investigations shall be performed under the supervision of experienced professionals whose education and experience meet or exceed the Secretary of the Interior's *Professional Qualifications Standards* (48FR44738-44739).

In dealing with prehistoric sites, the project sponsor and consulting archaeologist shall ensure that all Federal and State laws and regulations regarding Native American concerns are strictly adhered to. A Native American consultant (Most Likely Descendant) shall monitor prehistoric archaeological excavation programs.

Upon completion of field investigations for both prehistoric and historic resources, comprehensive technical reports shall be prepared that describe the archaeological project's goals and methods, and present its findings and interpretations. The report should integrate the important archaeological data recovered through excavation with the information gathered through archival research, and address relevant research considerations. The final report(s) shall include the following elements: executive summary; statement of scope; project location and setting; previous research summary; research goals and the strategies that guided research, testing and data recovery; field and lab methods; archival research; archaeological context; artifact descriptions; consideration of research problems and questions; conclusions and additional recommendations; references cited; and appendices (reports of technical analyses).

Copies of preliminary and final report(s) should be provided to the SHPO, State Water Resources Control Board (SWRCB) and the Historical Resources Information System, Northwest Information Center at Sonoma State University.

After
Mitigation *Less than Significant*

Avoidance and/or data recovery would fully mitigate any potential impacts to archaeological resources.

IMPACT: CR-3: Will the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Analysis: *No Impact; LPA and Alternate Castroville Passenger Platform Site*

Based on available information, it has been determined that no known paleontological or unique geological feature is located within the project area.

Mitigation: None required.

IMPACT: CR-4: Will the project disturb any human remains, including those interred outside of formal cemeteries?

Analysis: *Significant; LPA and Alternate Castroville Passenger Platform Site*

No human remains have previously been recorded within or immediately adjacent to the project area. No human remains or burials were identified during the field survey conducted in November 2002 by Parsons staff archaeologists. There, however, is the possibility that human remains and associated artifacts not identified from the review of records at the NWIC will be encountered during construction of the project. This impact is considered significant.

Mitigation: **CR-4: Protection of Human Remains**

If human burials are encountered, all work in the area will stop immediately and the county coroner's office shall be notified within 48 hours. If the remains are determined to be Native American in origin, both the NAHC and any identified descendants must be notified by the coroner and recommendations for treatment solicited (CEQA Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and 5097.98). The Commission shall immediately notify those persons it believes to be the most likely descendants of the deceased Native American. Treatment of the remains will be dependent on the views of the most likely descendent.

After

Mitigation *Less than Significant*

Treatment of remains according to the mitigation described above would reduce impacts to less than significant.

3.4.7 CUMULATIVE IMPACTS

IMPACT: CR-C1: Will the project have the potential to have a cumulative impact on cultural resources?

Analysis: *No Impact*

Cultural resources and potential impacts to those resources are site-specific and have been fully mitigated at the project level. No cumulative impacts are therefore anticipated.

3.4.8 CONCLUSION

With implementation of the above-referenced mitigation measures, cultural resource impacts resulting from the proposed project would be less than significant.

3.4.9 REFERENCES

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3.5 GEOLOGY, SOILS, AND SEISMICITY

3.5.1 INTRODUCTION AND SUMMARY OF IMPACTS

This section describes the geology, soils, and seismicity that characterize the Project area and addresses potential project-specific impacts resulting from these features. Impacts evaluated include:

- Potential seismic related hazards including ground shaking, ground rupture, liquefaction, differential compaction, and seismic settlement.
- Potential non-seismic hazards associated with site soils including erosion potential, collapsible and expansive soils, and subsidence.

A summary of geologic resource and seismic impacts is presented below. Full analyses of the impacts are included in Section 3.5.6.

<i>IMPACT</i>	<i>SIGNIFICANCE BEFORE MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>SIGNIFICANCE AFTER MITIGATION</i>
GEO-1: Will the Project be located within an area of unstable slope conditions?	No impact	No mitigation necessary.	No impact
GEO-2: Will the Project be located within an area of unstable slope conditions?	No impact	No mitigation necessary.	No impact
GEO-3: Will the Project be located in areas with soils and groundwater conditions that are susceptible to liquefaction during an earthquake?	Potentially significant	GEO-3: Minimize risk of liquefaction damage by applying standard design and construction practices.	Less than significant
GEO-4: Will earthquake-induced strong ground shaking damage Project facilities?	Potentially significant	GEO-4: Minimize damage due to ground shaking by applying standard structural engineering design and construction practices.	Less than significant
GEO-5: Will construction of the Project cause off-site water-related soil erosion?	No impact	No mitigation necessary.	No impact
GEO-6: Will the Project be exposed to damage due to expansive soils?	Less than significant	No mitigation necessary.	Less than significant
GEO-C1: Will the Project have the potential to have a cumulative geologic hazard impact?	Less than significant	No mitigation necessary.	Less than significant

3.5.2 ENVIRONMENTAL SETTING

Regional Geology

The project area is located in the California Coast Ranges geomorphic province, which is characterized by northwest-trending mountain ranges, broad basins and narrow valleys that are aligned generally parallel to major geologic structures and the coastline of Central California. The three project sites are located in the Pajaro Valley and northern Salinas Valley west of the San Andreas fault. The sites are within the Salinian tectonic block, an elongate narrow sliver of land that is gradually gliding northward relative to the North American plate along the San Andreas fault. The Salinian block is underlain by metamorphic and granitic basement rocks. In the project vicinity, the basement rocks occur at a depth of approximately 2,000 to 4,000 feet along the coast; the shallowest bedrock consists of a relatively undisturbed and nearly flat-lying sequence of Tertiary rocks. The Tertiary rocks that overlie the basement in the region include approximately 300 feet of marine mudstone and thin sandstones of Miocene-age Monterey Formation; 1,900 feet of interbedded marine sandstone and siltstone of the Pliocene-age Purisima Formation (Clark and Reitman 1973), and 400 to 700 feet of sands, silts and clays of the Pleistocene-age Aromas Sands (Hanson 2003). Surficial deposits include Pleistocene-age river terrace deposits, Holocene-age dune and beach sands along the coast, alluvial deposits within river and stream drainages, and marsh deposits within the estuaries and sloughs.

Local and Surficial Geologic Units

The following descriptions of the surficial geologic deposits at the Project sites are based on maps of geology and liquefaction potential produced by the U.S. Geological Survey (USGS) (Dupre and Tinsley, 1980).

Quaternary Basin Deposits (Qb)

This geologic unit underlies most of the Pajaro Station (Watsonville Junction) parcel. In addition, Qb deposits underlie a narrow sliver north of the Salinas site between the train tracks and the small drainage swale north of the site. The Basin Deposits are unconsolidated plastic clay and silty clay containing much organic material. Locally these deposits contain interbedded thin layers of silt and silty sand. Qb materials were deposited in a variety of environments including estuaries, lagoons, tidal flats, marsh-filled sloughs, flood basins, and lakes. The thickness is highly variable and may be as much as 100 feet thick underlying some sloughs. Qb deposits generally have high susceptibility to flooding and moderate to high liquefaction susceptibility except where water table is more than 33 feet below the surface. Highly expansive soils develop on these deposits.

Older Flood Plain Deposits (Qof)

This geologic unit underlies the northwestern corner of the UPRR parcel in the vicinity of the intersection of Salinas Road and Railroad Avenue, which includes the Pajaro Station site. The same unit underlies the central area of the Salinas site. Qof deposits are unconsolidated, relatively fine grained, heterogeneous deposits of sand and silt, commonly including relatively thin layers of clay. Qof deposits are locally as much as 100 m thick where they fill buried valleys beneath the Salinas and Pajaro River valleys; the lower part of this valley fill contains much gravel and constitutes a major ground-water aquifer in the region. Rivers are presently entrenched as much as 20 feet below the surface of these deposits except near the coast. Depth to water table is variable, but is generally 10 to 33 feet. Qof deposits are moderately well drained, tend to develop immature soils, and have moderate susceptibility for liquefaction except where depth to water table is greater than 33 feet.

Youngest Terrace Deposits of Antioch (Qan1)

This geologic unit underlies the entire Castroville Station site 1 area and most of the site 2 area. The northern and western sides of the site 2 area are underlain by swales filled with thin Qb deposits. Qan1 deposits consist of semiconsolidated, moderately well to poorly sorted sand, silt, and clay with interbedded gravel. The thickness of the unit locally exceeds 100 feet. Terrace surfaces consist of moderately well drained, maximally developed soils; some expansive soils may be present, particularly where developed on old floodbasin deposits. This unit has low susceptibility to flooding and low susceptibility for liquefaction.

Channel-fill Deposits (Qcf)

A narrow area of this unit coincides with the small drainage gully that lies adjacent to the north side of the train tracks on the north side of the Salinas site. The deposits are unconsolidated, highly plastic, poorly sorted clay, silty clay and silt overlying moderately well-sorted silt and sand deposited in abandoned channels within both younger and older flood-plain deposits. Thickness of fill is generally less than 10 feet but many of these areas have been artificially filled with material that is poorly compacted and prone to subsidence. Expansive soils are common. These areas are poorly drained, and groundwater is generally within 10 feet of the surface. Liquefaction susceptibility of underlying channel deposits is generally high.

Soils

The following discussions of soils and soil properties are based on maps and determinations made by the US Department of Agriculture, Soil Conservation Service (USDA-SCS), which is now named the Natural Resources Conservation Service (NRCS).

Pajaro Passenger Platform at Site #1 (Watsonville Junction)

Watsonville Junction and the proposed site of the Pajaro passenger platform are within the Pajaro River flood plain. Site soils were mapped as belonging to the

Clear Lake series which is characterized by poorly drained alluvium that formed on flood plains or in basins. The alluvial deposits derived from sedimentary rocks in the surrounding ranges. The specific soil type at Pajaro is the Clear Lake clay, moderately wet.

Clear Lake clay is present on nearly level ground found on flood plains and in basins. Runoff is very slow and there is little or no erosion hazard. Clear Lake clay has shrink-swell potential that tends to decrease with depth: high between 0 and 33 inches below the surface, moderate between 33 and 54 inches, and low between 54 and 62 inches below the surface. Corrosion potential for this soil is high for uncoated steel and low for concrete (USDA-SCS, 1978).

Castroville Passenger Platform at Site #1 and Site #2

Soils at the Castroville Passenger Platform Site #1 station location are mapped as belonging to the Santa Ynez series. Generally, the Santa Ynez series is moderately well drained alluvium derived from sandstone and granitic rock. Much of the area in and around Castroville is Santa Ynez fine sandy loam. Runoff is slow or medium and the erosion hazard is slight to moderate. Santa Ynez sandy loam has a low shrink-swell potential between 0 and 18 inches below the surface, increasing to moderate between 18 and 43 inches, and high between 43 and 61 inches below the surface. Corrosion potential for this soil is moderate to high, increasing with depth, for uncoated steel and low for concrete.

Per the Castroville Passenger Platform Site #2 Conceptual Plan dated June 2005, the site soils are also Santa Ynez fine sandy loam. Cropley silty clay soils occur near the northern boundary of the site. Cropley silty clay is well drained; runoff is slow to medium; and the erosion hazard is slight to moderate. Cropley silty clay has a high shrink-swell potential from the surface to a depth of 69 inches. Corrosion potential for this soil is high for uncoated steel and low for concrete (USDA-SCS, 1978).

Salinas Layover Yard Facility and Intermodal Transportation Center

Soils at the Salinas Amtrak station include Cropley silty clay northeast of the current UPRR main track and Salinas clay loam southwest of the track. The proposed layover facility and intermodal transportation center would be located on the southwest side of the UPRR main track.

The Salinas soil series consists of well drained alluvial soils derived from sedimentary and granitic rocks. Salinas clay loam occurs on low terraces. The surface layer is clay loam, silty clay loam, heavy loam, or heavy silt loam. Runoff is slow and the erosion hazard is minimal. This soil has a moderate shrink-swell potential from 0 to 5 inches below the surface and low shrink-swell potential from 5 to 75 inches below the surface. Corrosion potential for this soil is high for uncoated steel and low for concrete (USDA-SCS, 1978).

Active Faults

An active fault is one that has ruptured the ground surface, displaced geologically young soil deposits (younger than 11,000 years old), exhibits tectonic creep, or linear trends of associated earthquake epicenters (Hart and Bryant, 1997). No active faults are known to cross the site areas; therefore direct fault rupture hazard is negligible. However, each of the sites is located within 10 miles of an active fault; therefore, potential for strong earthquake groundmotion is significant. The recognized faults and their relevant parameters are listed in Table 3.5-1.

Table 3.5-1

Faults and Maximum Earthquakes that Could Affect Project Facilities

Fault	Distance from Site (miles) ¹			Mmax ²	Recurrence Interval (years) ²	Fault Type ³	Alquist - Priolo Zone
	Pajaro	Castroville	Salinas				
San Andreas Fault, Pajaro Segment	5.6	12	12	6.8	400	A	yes
San Andreas Fault, 1906 Segment	4.8	12	13	7.9	210	A	yes
Zayante-Vergeles FZ	1.6	7.9	9.6	6.8	8,821	B	no
Sargent Fault	7.5	15	17	6.8	1,200	B	yes
Calaveras-Paicines Fault	16	19	17	6.2	33	B	yes
Monterey Bay-Tularcitos F.Z.	16	9	12	7.1	2,841	B	no
Palo Colorado-San Gregorio FZ	23	17	22	7.3	400	B	yes

Source: Greene et al., Hall et al., Jennings, Peterson et al., and UBC 1997.

Notes:

¹Approximate distance from project sites: Greene et al. (1973), Hall et al. (1974), and Jennings (1994).

²Maximum potential earthquake magnitude (Moment Magnitude scale) and estimated recurrence time of Mmax earthquake per CDMG (Peterson et al., 1996).

³Fault type for engineering design, seismic coefficient selection as defined in UBC (1997).

Type A: Faults that are capable of producing large magnitude events and have a high rate of seismic activity.

Type B: Faults that are either capable of large magnitude earthquakes or high rate of activity, but not both.

San Andreas Fault

Project sites are located between 5.6 and 12 miles to the west of the Pajaro segment of the San Andreas fault. The fault intersects the Union Pacific Railroad right-of-way and Highway 129 at Chittenden and the zone of active fault deformation is more than 1,000 feet wide. The Pajaro segment is a zone of transition between two segments of the San Andreas fault that have different behaviors in terms of characteristic earthquake magnitude and frequency of earthquake occurrence. The Santa Cruz mountains segment to the north typically generates large and infrequent earthquakes such as the moment magnitude (Mw) 7.0 Loma Prieta earthquake of 1989, and the Central California segment is characterized by active fault creep and frequent moderate to small earthquakes. The North Coast, Peninsula, and Santa Cruz Mountains segments of the San Andreas all ruptured together during the Mw 8 San Francisco earthquake of 1906. The fault rupture of the 1906 earthquake reportedly extended northward beyond Fort Bragg and as far south as San Juan Bautista (Lawson, 1908). The subsurface rupture of the 1989 Loma Prieta earthquake in the Santa Cruz Mountains, as inferred from geophysical measurements, extended from Highway 17 southeastward to a point just east of Watsonville.

Zayante-Vergeles Fault

This fault is approximately 50 miles long, located along the western side of the Santa Cruz Mountains, and oriented parallel to the San Andreas fault. The surface expression of this fault is less distinct than the San Andreas but sufficient to raise concern that it may be capable of infrequent large earthquakes. It is not known to have any earthquakes associated with it and is not considered active within the definition of the Alquist-Priolo Earthquake Fault Zoning Act. The subsurface alignment of this fault lies 1.6 miles to the east of Pajaro station; from there it trends towards the southeast and bends eastward to intersect the San Andreas fault several miles south of San Juan Bautista.

Palo Colorado-San Gregorio Fault

This fault is the westernmost feature of the San Andreas fault system; it is located mostly offshore except for short segments where it intersects land at Half Moon Bay, Pt. Ano Nuevo, and south of Carmel. Its length may be as much as 230 miles; it may extend from offshore San Francisco to southwest of Morro Bay. Based on distinct surface expression onshore, offset marine terraces with age dates, and its great length, it is considered to be capable of major earthquakes. The Monterey Bay segment of the San Gregorio fault probably generated the two moderate earthquakes that shook the Project region in 1926.

Sargent Fault

The Sargent-Berrocal zone is a 58-mile long, complexly branching system of southwest dipping thrust and reverse faults. Evidence of recent activity along the

Sargent fault includes reports of surface rupture in Palo Alto during the 1906 earthquake and possible aftershocks of the 1989 Loma Prieta earthquake.

Calaveras Fault

The Calaveras fault is a major component of the right-lateral, strike-slip San Andreas fault system. It extends about 80 miles from Danville southeastward to Hollister. East of San Jose, the Hayward fault merges with the Calaveras fault, which continues southeastward and appears to merge with the San Andreas. This southern segment of the Calaveras fault is well delineated by large numbers of microearthquakes. It has generated numerous small earthquakes and several moderate to large earthquakes (M6.5 in 1911, M5.9 in 1979, and M6.2 in 1984) but has not generated a major earthquake during historical time.

Monterey Bay Fault Zone

The Monterey Bay Fault Zone is a broad band of short parallel faults, each 5 to 10 miles in length, that trend northwestward across the center of Monterey Bay. The fault zone extends from west of Santa Cruz southeast to Seaside and may continue to align with onshore faults such as the Tularcitos fault that continue to the southeast parallel to the southwest side of the Salinas Valley. Publications of the California Geologic Survey (Jennings et al 1994) identify this zone as having evidence of Quaternary movement, active in the last 1.5 million years. However, diffuse seismic activity in the area is not clearly associated with this fault zone and it is not considered active within the definition of the Alquist-Priolo Earthquake Fault Zoning Act.

Historical Seismicity

The Santa Cruz-Salinas-Monterey Bay area is seismically active. Earthquake size and severity can be characterized in several ways. The size or source energy of an earthquake is measured instrumentally and described as the earthquake magnitude. The intensity of potential seismic ground shaking at a site is dependent on an earthquake's magnitude, distance, and the soil and rock properties at the Project site.

The project area has been subjected to numerous moderate and large earthquakes generated by faults related to the predominantly right-lateral, strike-slip San Andreas fault system (Greene et al, 1973). Two notable regional earthquakes include the 1906 San Francisco Earthquake with a moment magnitude (M_w) of approximately 8 and the 1989 Loma Prieta Earthquake (M_w 7.0) both of which ruptured nearby segments of the San Andreas Fault in the Santa Cruz Mountains to the north and northwest of the sites. A similar magnitude event reportedly occurred on the San Andreas Fault in the Santa Cruz Mountains in 1865 (M 6.6) and farther north in the central San Francisco Peninsula in 1838 ($M_w > 7.2$). Moderate to strong earthquakes also occurred in the vicinity in 1890, twice in 1899, and again in 1926. The 1926 earthquake was probably centered within the offshore Monterey Bay fault zone. Two local earthquakes caused damage in Watsonville in 1954 and 1964. A group of earthquakes with a maximum magnitude of 5.4 occurred in 1990 near Chittenden outside the aftershock zone of the 1989 earthquake.

Site effects related to human perception and observed damage are commonly evaluated using the Modified Mercalli Intensity (MMI) Scale. These 12 ratings (I to XII) are based on human observations and average degree of damage in an area and are not measured with instruments. Intensity is based on human reactions at the low end of the MMI Scale and by structural damage and geologic effects at the high end of the scale:

<u>Rating</u>	<u>Description</u>
I.	Not felt except by a very few under especially favorable circumstances.
II.	Felt only by a few persons, at rest, especially on upper floors of buildings. Delicately suspended objects may swing.
III.	Felt quite noticeably indoors, especially on upper floors of buildings, but many do not recognize it as an earthquake.
IV.	During the day felt indoors by many, outdoors by few. At night some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building.
V.	Felt by nearly everyone; many awakened. Some dishes, windows, etc., broken; a few instances of cracked plaster; unstable objects overturned. Disturbance of trees, poles and other tall objects sometimes noticed.
VI.	Felt by all, many frightened and run outdoors. Some heavy furniture moved; a few instances of fallen plaster or damaged chimneys. Damage slight.
VII.	Everybody runs outdoors. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken.
VIII.	Damage slight in specially designed structures; considerable in ordinary substantial buildings with partial collapse; great in poorly built structures.
IX.	Damage considerable in specially designed structures; well designed frame structures thrown out of plumb; damage great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously.
X.	Some well built wooden structures destroyed; most masonry and frame structures destroyed with their foundations; ground badly cracked. Rails bent. Landslides considerable from river banks and steep slopes.
XI.	Few, if any (masonry), structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipes completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.
XII.	Damage total. Waves seen on ground surfaces. Lines of sight and level distorted. Objects thrown upward into the air.

Within the last 200 years, the Project area has experienced numerous strong earthquakes that caused ground shaking of intensity VI or greater. Table 3.5-2 summarizes magnitude and distance from the Project area for major historic earthquakes that affected the Project

area with significant groundmotion intensity. The table shows that many earthquakes occurred in the region in the late 1800's and the last 50 years have been a less active period. Historically the maximum ground shaking experienced in northern Monterey County corresponds to MMI VII to VIII. These are levels at which extensive property damage can occur depending on the types of structures.

Table 3.5-2

Earthquakes with Modified Mercalli Intensity VI or
Magnitude 5 or Greater in Project Area

Date	MMI Reported or Estimated In Project Area	Approximate Epicenter Distance from Project (miles)	Epicenter Location	Estimated Magnitude
1800	--	~ 15	San Juan Bautista	6.0
1836	VI – VII	70+	Hayward fault	6.8
1838	VII – VIII ?	~ 65	S.F. Peninsula	7+
1856 to 1864	V - VI	40 – 60	Four moderate eqks in So. Santa Clara Valley – SF Peninsula region	5.4, 5.9, 6.1, 5.9
1865	VII-VIII	11 - 25	North flank Santa Cruz Mtns. San Jose	6.6+
1865	V - VI	15 – 30	North of Gilroy	5.5
1868	VI - VII	60 - 70	Hayward	7+
1882	V – VI	~ 35	Hollister	5.7
1883	VI - VII	10 – 18	San Juan Bautista	5.6
1884	VI	30 – 45	Davenport	5.9
1885	V – VI	20 – 50	Three eqks E & SE of Salinas on San Andreas fault	5.7, 5.5, 6.2
1890	VI	7 - 15	East of Watsonville on SAF	6.0
1892	VI	12 – 18	San Juan Bautista	5.6
1897	V-VII	15 - 25	Gilroy	6.2
1899	VI – VII	25 – 40	East of Morgan Hill	5.8
1899	VI-VII	2 - 17	East of Watsonville	5.6
6/11/1903	VI-VII	32 - 49	Santa Clara	5.8
8/3/1903	V	26 - 39	San Jose	5.8
1906	Watsonville VIII Castroville & Salinas VII	~ 70	San Francisco	8.3
1910	V-VI	5 - 18	West of Watsonville	5.5

Table 3.5-2

Earthquakes with Modified Mercalli Intensity VI or
Magnitude 5 or Greater in Project Area

Date	MMI Reported or Estimated In Project Area	Approximate Epicenter Distance from Project (miles)	Epicenter Location	Estimated Magnitude
1911	V – VI	20 - 40	Coyote (Santa Clara)	6.6
10/22/1926	V-VI	~ 30	Offshore, Monterey Bay, two earthquakes	6.1, 6.1
1963	--	6 - 12	at Chittenden on SAF	5.2
1984	V	30 - 50	Morgan Hill	6.2
1989	Watsonville VIII Castroville & Salinas VII	12 - 27	Loma Prieta, Santa Cruz Mtns. ~ 50 aftershocks w/ $M \geq 4$	7.1
1990	--	6 - 12	at Chittenden, strongest of 6 earthquakes w/ $M \geq 4$	5.4

Source: McNutt and Sydnor (1990) CDMG Special Publication 104.

Seismic Hazards

Seismic hazards include ground rupture due to faulting, ground shaking, differential settlement, and liquefaction. Strong ground shaking can damage structures, their foundations, and contents. Strong ground shaking may also trigger secondary effects such as liquefaction or ground settlement in some areas.

Ground Rupture

The Project sites do not lie on or in the immediate vicinity of known active faults. The Zayante-Vergeles fault lies within 2 miles of the Pajaro station; however, the fault is not considered active within the definition of the Alquist-Priolo Act. Although ground rupture may occur along undetected traces of known faults, the potential for this to occur at the Project sites is very low.

Ground Shaking

Strong shaking generated by earthquakes along any of the faults in northern California could affect the Project area, depending on the location and characteristics of the earthquake. The most likely sources of strong ground shaking in the Project area are the San Andreas, Calaveras, and Palo Colorado-San Gregorio faults (Table 3.5-1). The Sargent, Monterey Bay, and Zayante-Vergeles faults are also potential earthquake sources (Peterson, 1996). However,

longer recurrence intervals are inferred for these faults indicating that they contribute much less to the overall seismic risk to Project facilities.

Probable earthquake peak ground acceleration (PGA) was calculated by the California Geologic Survey (CGS) (formerly California Division of Mines and Geology [CDMG]) at grid points throughout the state to produce a contour map of PGA (Peterson, 1999). The PGA values on the map represent a 10% chance that the site will experience that ground acceleration or greater within 50 years. For the Pajaro vicinity the predicted 10% PGA is in the range of 0.5g to 0.6g. For the Castroville and Salinas sites the predicted 10% exceedance PGA is in the range of 0.4g to 0.5g.

Differential Compaction/Seismic Settlement

Fine-grained soil and clay are subject to seismic settlement and differential compaction. Areas with low-density silts and clays associated with fluvial depositional environments (old lakes, sloughs, swamps and streambeds) are subject to seismically-induced settlement. The extent of compaction may range from a few inches to several feet in depth. The potential for differential compaction is highest during large earthquakes. The potential for differential compaction and seismic settlement on the Project sites is greatest in areas with Cropley (north of Castroville Alt#2 site and northern portion of Salinas site) and Clear Lake soils (Pajaro site) and lowest in areas with Salinas soils (majority of Salinas site).

Liquefaction

Liquefaction occurs when a water-saturated cohesionless soil temporarily loses its strength when subjected to intense and prolonged ground shaking. When liquefaction occurs, soils may become mobile even on gently sloping ground. Building foundations may sink or tilt into underlying soil and differential ground subsidence may occur. Pipelines, roadways, and other structures may crack, break, or become offset due to liquefaction. In liquefaction prone areas, damaging lateral spreading soil failures can occur even on gently sloping sites such as plains adjacent to creek beds and estuaries. The areas that have the greatest potential for liquefaction are those in which the water table is shallower than 30 feet below ground and the soils are predominately clean, relatively uniform sand of loose to medium density. Clay soils are generally not susceptible to liquefaction.

Soil liquefaction susceptibility in the Project area was mapped by the US Geological Survey prior to the occurrence of the 1989 Loma Prieta earthquake (Dupre and Tinsley, 1980). Areas were classified for liquefaction susceptibility based on soil profiles, soil properties determined by geotechnical testing, ground motion shaking calculations, and previous site soil performance during strong historical earthquakes. Another USGS publication documents the historical occurrences of many soil liquefaction failures, seismic ground settlements, lateral

spreads, ground cracks, and sand and water ejected from the ground during the 1906 earthquake (Youd and Hoose, 1978). Liquefaction ground disturbance of this kind was abundant in 1906 in the Watsonville area and all along the Pajaro River, the Salinas River, and waterfront and beach areas between the two river mouths. Seismic soil failures were notably absent in the Castroville area and no liquefaction was documented in the central Salinas area.

Liquefaction related damage due to the 1989 Loma Prieta earthquake was less widespread than in 1906 but similar in distribution and effects. Soil failures occurred in the same general areas during both earthquakes especially along the Pajaro River and in Watsonville. Limited historical accounts indicate that major ground failures also occurred in Watsonville in 1865. Reports of less extensive seismic soil failures occurred several miles upstream along the Pajaro River due to moderate earthquakes in 1890, 1953, and 1954.

3.5.3 REGULATORY SETTING

General Plan Goals, Objectives, and Policies

Table 3.5-3 identifies goals, objectives, and policies that provide guidance for development in relation to geology, soils and seismicity in the Project area. The table also indicates which evaluation criteria in the Geology, Soils, and Seismicity Section are responsive to each set of policies. The Monterey County General Plan written in 1982 is currently being updated but it has not yet been ratified by the Planning Commission and Board of Supervisors. Therefore, the 1982 Monterey County General Plan Goals, Policies, and Objectives were used for reference.

Table 3.5-3

General Plan Goals, Objectives, and Policies Geology, Soils, and Seismicity

Adopted Plan Document	Document Section	Document Reference	Policies	Relevant Evaluation Criteria
Monterey County 1982 General Plan	Chapter II. Environmental Constraints, Seismic Hazards Element	Goal 15. Seismic & Other Geologic Hazards	Policy 15.1.12. Grading permits, site plans, and geology and soils studies.	1, 2, 3, 4, 5, 6
Monterey County 1982 General Plan	Geology, Minerals, & Soils Element	Goal 3. Geology, Minerals, & Soils	Policy 3.1. Erosion control.	1, 2, 3, 4, 5, 6

Table 3.5-3

General Plan Goals, Objectives, and Policies
Geology, Soils, and Seismicity

Adopted Plan Document	Document Section	Document Reference	Policies	Relevant Evaluation Criteria
North County Land Use Plan (Local Coastal Program)	Resource Management	2.5. Water Resources, Erosion and Sedimentation Control	Policy 2.5.3.C.2. Permit requirement for all new development in the watershed of Moro Cojo Slough. Policy 2.5.3.C.6. Erosion Control Measures	1, 2, 3, 4, 5, 6
Salinas General Plan (2002)	Safety Element, Natural Hazards	Goal S-4. Reducing risk of natural hazards	Policy S-4.1. Development review and mitigation.	1, 2, 3, 4, 5, 6

Sources: <http://www.co.monterey.ca.us/gpu/Reports/0104/>
http://www.ci.salinas.ca.us/CommDev/GenPlan/GenPlanFinal/Elements/Safety_Element.pdf. County of Monterey General Plan 1982

3.5.4 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

According to the CEQA Guidelines, exposure of people or structures to major geologic hazards is considered a significant impact. Geologic hazards within the Project area include strong ground shaking, fault rupture, liquefaction, and other processes that could affect soil stability. The following significance criteria were used to evaluate the geology, soil, and seismic impacts associated with the proposed Project (Table 3.5-4).

Table 3.5-4

Evaluation Criteria with Points of Significance
Geology, Soils, and Seismicity

Evaluation Criteria	As Measured by	Point of Significance	Justification
1. Will Project facilities be located within an area of unstable slope conditions?	Geotechnical assessment of landslide risk potential	Any portion of facilities within area with an overall rating of Moderate to High	CEQA Appendix G Monterey County Code: Ch. 16.08 – Grading

Table 3.5-4

**Evaluation Criteria with Points of Significance
Geology, Soils, and Seismicity**

Evaluation Criteria	As Measured by	Point of Significance	Justification
2. Will Project facilities be subject to ground rupture due to location near a surface trace of an active fault?	Location of facilities within an Alquist-Priolo earthquake fault zone	Any portion of facilities within zone	CEQA Appendix G Alquist-Priolo Earthquake Fault Zoning Act
3. Will Project facilities be located in areas with soils and groundwater conditions that are susceptible to liquefaction during an earthquake?	CDMG rating of potential for liquefaction or more detailed mapping, where available	Any portion of facilities within area with a rating of High for liquefaction	CEQA Appendix G Calif. Geol. Survey Guidelines for Evaluating and Mitigating Seismic Hazards (CDMG 1997, Special Publication 117)
4. Will earthquake-induced strong ground shaking damage Project facilities?	Structural design and construction not in conformance with requirements of applicable building codes.	Construction not in conformance with applicable building codes.	CEQA Appendix G California Health and Safety Code Building Codes, UBC 1997 w/ 1998 Calif. Amendments
5. Will construction of the Project cause off-site water-related erosion?	Construction activities not in compliance with requirements of the Project National Pollutant Discharge Elimination System Permit (NPDES), or building and grading codes.	Construction not in compliance with NPDES or building and grading codes.	CEQA Appendix G Clean Water Act. North Monterey County Land Use Plan (Local Coastal Program) Monterey County Code: Ch. 16.08 - Grading; Ch. 16.12 - Erosion Control Santa Cruz County Code: Ch. 16.22 – Erosion Control
6. Will Project facilities be exposed to damage due to expansive soils?	Shrink-swell potential as rated in Monterey County Soil Survey (USDA-SCS 1978)	Design and construction practices not in compliance with building codes.	CEQA Appendix G Building Codes, UBC 1997 w/ 1998 Calif. Amendments

Source: Parsons 2005.

3.5.5 METHODOLOGY

This impacts analysis is based on a review of relevant geologic literature and technical reports concerning the Project area.

3.5.6 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION MEASURES

IMPACT: GEO-1: Will the Project be located within an area of unstable slope conditions?

Analysis: *No Impact, LPA and Alternate Castroville Passenger Platform Site*

The proposed Project site areas are located on level ground with no landslide risk potential.

Mitigation: No mitigation is necessary.

IMPACT: GEO-2: Will the Project be located within an area of unstable slope conditions?

Analysis: *No Impact, LPA and Alternate Castroville Passenger Platform Site*

The proposed Project sites areas are not within Alquist-Priolo earthquake fault zones. A fault considered to be a potential source of earthquakes passes within 2 miles of the Pajaro Passenger Platform at Site #1; however, direct damage from surface rupture is considered very unlikely since no faults are known to pass through the site parcel. Ground rupture is possible along undetected traces of known faults, but the potential for this to occur at any of the sites is low due to the distances between the Project sites and known active faults.

Mitigation: No mitigation is necessary.

IMPACT: GEO-3: Will the Project be located in areas with soils and groundwater conditions that are susceptible to liquefaction during an earthquake?

Analysis: *Potentially Significant, LPA and Alternate Castroville Passenger Platform Site*

The Pajaro Passenger Platform at Site #1, which is part of both project alternatives, is within an area rated as having Moderate soil liquefaction susceptibility during a strong earthquake. However, the northwestern corner of the site lies adjacent to an area rated as having Very High susceptibility based on repeated historical liquefaction failures in the same area. The exact location of the boundary between the two zones is uncertain.

The Salinas site area is within an area in which soil liquefaction susceptibility during a strong earthquake is rated Moderate overall.

The Castroville Passenger Platform at Site #1 is located within an area in which soil liquefaction is rated Low; however the LPA, Castroville Passenger Platform at Site #2 (adjacent to the north side of State Route 156) is partly within an area that is rated Moderate.

Mitigation: **GEO-3: Minimize risk of liquefaction damage by applying standard design and construction practices.**

All structures proposed for the Project would be designed and constructed in compliance with the Uniform Building Code requirements for Seismic Zone 4. High liquefaction susceptibility areas would be delineated and avoided or corrected to the extent possible through set-backs and other geotechnical design measures per CGS guidelines (CDMG 1997). In areas having Moderate liquefaction susceptibility, standard engineering design and construction practices would also be employed to minimize the risk of soil instability.

After

Mitigation: *Less than Significant, LPA and Alternate Castroville Passenger Platform Site*

The risk of damage would be reduced to minimal levels by incorporating appropriate engineering design measures for both proposed Castroville Passenger Platform sites and Salinas site area facilities. This measure reduces potential damage induced by liquefaction to the minimal levels attainable by feasible design and construction methods as required by state and local building codes. At the Pajaro Passenger Platform site, impacts resulting from a major earthquake and soil liquefaction of the Pajaro River plain alluvium would be minimized since structures would not be located in the northwestern portion of the site.

IMPACT: GEO-4: Will earthquake-induced strong ground shaking damage Project facilities?

Analysis: *Potentially Significant, LPA and Alternate Castroville Passenger Platform Site*

New structures and facilities could be subject to significant ground shaking. Historically, the most severe ground shaking experienced in the Project area has been rated MMI VIII. However, the maximum expected earthquake intensity for the area is potentially larger. During an intensity VIII or greater event, damage to well-made structures would be expected to occur. California Geological Survey publications estimate earthquake accelerations of 0.4g to 0.5g to have a 10% probability of exceedance in 50 years for the Castroville and Salinas facilities. The estimated PGA for the Pajaro Passenger Station at Site #1 is 0.5g to 0.6g.

Mitigation: **GEO-4: Minimize damage due to ground shaking by applying standard structural engineering design and construction practices.**

All structures proposed for the Project must be constructed in compliance with seismic requirements stipulated by the current Uniform Building Code (UBC) for Seismic Zone 4.

After

Mitigation: *Less than Significant, LPA and Alternate Castroville Passenger Platform Site*

This measure reduces potential damage resulting from earthquake ground shaking to the minimal levels attainable by feasible design and safe construction methods as required by local building codes.

IMPACT: GEO-5: Will construction of the Project cause off-site water-related soil erosion?

Analysis: *No Impact, LPA and Alternate Castroville Passenger Platform Site*

Standard engineering design practices and Best Management Practices to control runoff during construction would be used in compliance with Monterey County Ordinances for Grading and Erosion Control. Therefore, the Project would not cause off-site water-related soil erosion.

Mitigation: No mitigation is necessary.

IMPACT: GEO-6: Will the Project be exposed to damage due to expansive soils?

Analysis: *Less than Significant, LPA and Alternate Castroville Passenger Station Site*

Project facilities may be built on parcels with soils that have moderate to high shrink-swell potential due to presence of plastic clays. Unmanaged shrinking and swelling of soils can damage buildings, roads, and other structures if the shrink-swell potential of the soil is rated moderate to very high and the properties are not taken into account in design. However, standard soils and foundation engineering practices compliant with local building code and UBC would identify soils shrink-well potential and assure that the soil properties are managed.

As part of the building permit process, a qualified soils engineer would conduct site-specific soil sampling and analysis to determine the location of expansive soils. Where expansive soils are present, standard engineering methods such as removal, stabilization, or specialized foundation design shall be used to eliminate, or reduce to acceptable levels, potential impacts from expansive soils.

Mitigation: No mitigation is necessary.

3.5.7 CUMULATIVE IMPACTS

IMPACT: GEO-C1: Will the Project have the potential to have a cumulative geologic hazard impacts?

Analysis: Less than Significant

Two impacts are identified in the Geology, Soils, and Seismicity section as either significant or potentially significant:

1. potential for damage from strong earthquake ground shaking, and
2. potential for damage from liquefaction.

The risks associated with these hazards are considered mitigated to a level of acceptable minimum risk by appropriate seismic design of structures and construction of foundations in accordance with state and local codes and ordinances.

The Project would construct facilities in a seismically active area, and thus contribute to the cumulative exposure of structures to seismic hazards in the region as a whole. However, this is the case for any Project constructed in Seismic Zone 4 which includes much of California. The actual level of risk is site-specific and would not be cumulatively increased at any particular site. Similarly, these facilities would be located in areas where there is a potential for damage from mobilization of soil due to liquefaction. While the Project would contribute to the cumulative exposure of structures to soils hazards, the level of risk would also be site-specific and would not be cumulatively increased within the area.

3.5.8 CONCLUSION

With implementation of the above-referenced mitigation measures, geologic impacts on the proposed project would be reduced to less than significant.

3.5.9 REFERENCES

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3.6 HAZARDOUS MATERIALS AND HAZARDOUS WASTES

3.6.1 INTRODUCTION AND SUMMARY OF IMPACTS

This EIR section addresses the Project's potential hazardous materials and hazardous waste issues. It evaluates the potential impacts from the use of hazardous materials during the facility's construction and operation, and the potential impacts associated with encountering hazardous wastes during construction. A summary of hazardous materials and waste impacts and mitigation measures is presented below. Full analyses of the impacts are included in Section 3.6.6.

<i>IMPACT</i>	<i>SIGNIFICANCE BEFORE MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>SIGNIFICANCE AFTER MITIGATION</i>
HM-1: Will the Project create a hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	Less than significant	No mitigation necessary.	Less than significant
HM-2: Will the Project create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials?	Less than significant	No mitigation necessary.	Less than significant
HM-3: Will the Project release hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Less than significant	No mitigation necessary.	Less than significant
HM-4: Will the Project expose workers or the public to hazards from a known hazardous waste site as identified pursuant to Government Code Section 65962.5 (Cortese List)?	Significant	HM-1a: Update Phase I Site Assessment summarizing reported releases of hazardous materials within the project area prior to construction. HM-1b: Monitor soil and groundwater during construction for evidence of hazardous waste.	Less than significant

<i>IMPACT</i>	<i>SIGNIFICANCE BEFORE MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>SIGNIFICANCE AFTER MITIGATION</i>
		HM-1c: Containerize and test suspect soil and groundwater prior to disposal. HM-1d: Inspect and Test for ACM and lead-based paint.	
HM-C1: Will the project have the potential to have a cumulative impact on hazardous materials or hazardous waste management?	Less than significant	No mitigation necessary.	Less than significant

3.6.2 ENVIRONMENTAL SETTING

Hazardous Wastes Associated with Former Site Uses

Phase I site assessments were performed for the three proposed station locations in 2002 (Parikh Consultants 2002a,b,c). The Salinas Layover Yard Facility at Site #2 and the ITC Expansion was resurveyed in 2005 (Parikh Consultants). The Phase I site assessments evaluated previous land uses in the vicinity of the proposed stations by examining historical aerial photographs, by conducting a field inspection of the station sites and by reviewing lists of known hazardous waste release sites compiled by federal and State regulatory agencies. The following paragraphs summarize the results of the Phase I site assessment for each station.

Pajaro Passenger Station (Site #1 – Watsonville Junction)

The proposed Pajaro Station would be located north of the intersection of Lewis and Salinas Roads, on land occupied by a railroad equipment storage yard, a building, a parking area, and a railroad “team track.” Because of the building’s age and condition, the site assessment indicated that there is some potential for asbestos containing material (ACM) and lead-based paint to be present in the building. The site assessment also noted that, due to the site’s proximity to Salinas and Lewis Roads, there is some potential for aeri ally deposited lead from vehicle exhaust emissions to be present in site soils at hazardous levels. Surface staining of the soil was noted in aerial photographs.

The site assessment report indicates that the proposed station site is identified as the “Watsonville Yard, Watsonville Train Depot at 499 Salinas Road” on several federal and State lists of hazardous waste sites—specifically lists that indicate leaking underground storage tanks (USTs) were present, including the Cortese List. Files at the Central Coast Regional Water Quality Control Board (RWQCB)

and the Monterey County Public Health Department indicated that the USTs had been removed from the site and that at least one of the case files had been closed by the RWQCB. The hazardous waste sites are located at the northern portion of the overall Watsonville Yard, Watsonville Train Depot property, north of the lands to be occupied by the proposed station platform and surface parking lot.

The site assessment recommends that soil samples be collected and analyzed for petroleum hydrocarbons found in diesel fuel and/or bunker oil, metals, polychlorinated biphenyls (PCBs) and polynuclear aromatic hydrocarbons (PAHs) and that groundwater samples be collected and analyzed for petroleum hydrocarbons found in diesel and “heavy petroleum hydrocarbons.”

Castroville Passenger Station Sites (Locally Preferred Alternative – Site #2 and Alternate – Site #1)

The LPA site would be located north of State Route 156 and both east and west of the UPRR right of way, on railroad land or on land that is used for agriculture (i.e., artichoke production). The site assessment noted that due to the site’s proximity to State Route 156, there is some potential for aeri ally deposited lead from vehicle exhaust emissions to be present in site soils at hazardous levels. Site #2 was not on any lists of known hazardous waste release sites compiled by federal and State regulatory agencies. The site assessment recommends that surface soil samples be collected and analyzed for petroleum hydrocarbons found in diesel fuel, metals, pesticides, and herbicides.

The Alternate site lies approximately one mile south of the LPA Castroville Passenger Station site and is adjacent to Del Monte Avenue south of State Route 156. This area is surrounded by industrial land uses and was the historical location of the Castroville Depot that serviced the Coast main line and the Monterey branch line. The station track and platform at Site #1 would be constructed on lands previously used for these same purposes. Parking would be constructed on lands currently paved for light industry equipment and vehicle storage. Although a site assessment is not available for this property, it may have surface soil contamination from petroleum hydrocarbons or PAHs found in diesel fuel, PCBs or metals because of its historic use as railroad yard, light industrial use and vehicle storage.

Salinas Intermodal Transportation Center Expansion and Layover Yard Facility

The proposed Salinas ITC and Layover Yard Facility would be located west of the intersection of Main and Market Streets, on land occupied by the current Salinas Amtrak station and on nearby commercial properties southeast of the station. Several buildings are present in the area (southeast of the Amtrak station) that is proposed for parking. The site assessments indicated that there is some potential for ACM and lead-based paint to be present in the buildings in this area. The site assessments also noted that there is some potential for aeri ally deposited

lead from vehicle exhaust emissions to be present in site soils at hazardous levels. Staining of surface soil was observed during the site visit.

The 2002 site assessment report indicates that the proposed station site is identified as the “Southern Pacific Railroad Site” on several Federal and State lists of hazardous waste sites—specifically lists that indicate leaking USTs were present, including the Cortese List. Files at the Central Coast RWQCB indicated that the leaks were discovered during UST removal and that the RWQCB had issued a closure letter for the site. The site assessment notes that there are several hazardous waste release sites near the Project site with soil or groundwater contamination.

The 2005 site assessment states that observations made during a site visit and a review of historical maps and plans indicated the presence of fuel oil tanks, dry wells and industrial activities on a parcel north of New Street. Fuel oil tanks and industrial activities could be sources of historical leaks or spills. Groundwater monitoring wells and a soil vapor extraction system were also observed in the general area of New Street during the site visit. Historical maps indicated the presence of a gasoline and fuel oil tank on a parcel containing a warehouse near Vale Street. Hazardous materials may have been drained or spilled into dry wells.

The site assessments recommend that soil samples be collected and analyzed for petroleum hydrocarbons found in diesel fuel and/or bunker oil, metals, solvents, PCBs and PAHs and that groundwater samples be collected and analyzed for petroleum hydrocarbons found in diesel and/or bunker oil. In addition, a visual site inspection for PCBs was performed by ATC Associates in 1998 of the Passenger Depot and Freight Depot (ATC Associates, 1998). No labels signifying “no PCBs” were found on the ballasts inspected. Therefore, it should be assumed that all light fixture ballasts in the Passenger and Freight Depot contain PCBs. The current status of any site investigations or remedial activities should be determined by contacting property owners or regulatory agencies. The site assessments also recommend that any buildings that would be demolished be inspected for ACM.

3.6.3 REGULATORY SETTING

Hazardous Materials and Hazardous Waste Laws and Regulations

The U.S. EPA defines a “hazardous” material as one “which because of its quantity, concentrations, or physiochemical or infectious properties, may either increase mortality or produce irreversible or incapacitating illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed (US Public Health and Welfare Code §6903).” Materials and wastes that exhibit hazardous properties require special handling and management. Their treatment, storage, transport and disposal are highly regulated by

federal, State and local governments, which minimizes the risk to the public presented by these potential hazards.

The federal hazardous waste laws are generally known as the Resource Conservation and Recovery Act (RCRA). These laws provide for the “cradle to grave” regulation of hazardous wastes. Any business, institution or other entity that uses hazardous materials and generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused or disposed. The EPA has primary responsibility for implementing RCRA but individual states are encouraged to seek authorization to implement some or all RCRA provisions. California received authorization to implement RCRA in August 1992.

The California Environmental Protection Agency’s (CalEPA’s) Department of Toxic Substances Control (DTSC) is responsible for implementing RCRA. The DTSC is also responsible for implementing and enforcing California’s own hazardous waste laws, which are known collectively as the Hazardous Waste Control Law. The California Hazardous Waste Control Law and its associated regulations are similar to RCRA but regulate a larger number of chemicals because they define hazardous waste more broadly. Hazardous wastes regulated by California but not by EPA are called non-RCRA hazardous wastes.

Chapter 6.95, Section 25503(a), of the California Health and Safety Code and Title 19 of the California Code of Regulations §2729, *et seq.*, requires any business that handles a hazardous material or mixture containing a hazardous material in reportable quantities to establish and implement a Hazardous Materials Business Plan for emergency response to a release or threatened release of a hazardous material. The State’s minimum reportable quantities are 500 pounds for a solid, 55 gallons for a liquid, and 200 cubic feet for a gas at standard temperature and pressure. Some acutely hazardous materials are reportable at much lower quantities. Santa Cruz County requires businesses to complete a short form of the Hazardous Materials Business Plan even if they handle hazardous materials below the State’s reportable quantities (Santa Cruz County Code 7.100.120). Businesses submit their plans to local Administering Agencies, which in Santa Cruz County is the County’s Environmental Health Services Department while in Monterey County it is the County’s Health Department. The Business Plan must identify the type of business, location, emergency contacts, emergency procedures, mitigation plans, and chemical inventory at each location.

Accidental Release Prevention Laws

Certain chemicals that could be released to the environment and affect surrounding communities are regulated by California’s Accidental Release Prevention Law. This State law and federal laws with similar provisions (*i.e.*, the Emergency Preparedness and Community Right-to-Know Act [EPCRA] and the Clean Air Act) allow local oversight of both the State and federal programs. The State and federal laws are similar in their requirements; however the California threshold planning quantities for regulated substances are lower than the federal values. Local agencies may set lower reporting thresholds or add chemicals to the program. Beginning in 1997, the Accidental Release

Prevention Law has been implemented by the State's Certified Unified Program Agencies (CUPA). The local CUPAs are the Santa Cruz County Environmental Health Services Department and the Monterey County Health Department. Any business where the maximum quantity of a regulated substance exceeds the specified threshold quantities must register with the health department in their County as a manager of regulated substances.

Lead-based Paint and Aerially Deposited Lead

Lead was used historically as a pigment and drying agent in oil-based paint. Although the legal limit for lead concentrations in paint was lowered to 0.06% (a trace amount) in 1978 by the U.S. Consumer Product Safety Commission, and was lowered voluntarily by some manufacturers prior to that, many structures built prior to the 1980s may still contain undercoats of lead-based paint. Additionally, weathering and routine maintenance of paint on buildings may contaminate nearby soils with lead. Leaded gasoline was used as a vehicle fuel in the United States from the 1920s until the late 1980s. Although lead is no longer used in gasoline formulations, lead emissions from automobiles are a recognized source of contamination in soils along roadways. Surface and near-surface soils along heavily used roadways have the potential to contain elevated concentrations of lead of several hundred milligrams per kilogram.

In 1998, an asbestos, lead-based paint, and PCBs inspection report was prepared for passenger and freight depot at the Salinas project site (ATC Associates, 1998). In addition, lead-based paint testing was also conducted at the Railroad Express Depot located on the same property. Results of the inspection testing and laboratory analysis identified lead-containing paint on most surfaces throughout the Passenger Depot, Freight Depot and the exterior of the REA building (ATC Associates, 1998).

Asbestos Containing Material (ACM)

ACM is commonly found in structures built prior to the 1980s. Typical ACM includes resilient floor covering, siding, asphalt roofing products, gaskets, and cement products (e.g., stucco). Current federal and California laws and regulations require that specific work practices be followed to abate the hazard associated with exposure to ACM during demolitions and renovations of all structures, installations, and buildings (excluding residential buildings that have four or fewer dwelling units). In addition, the regulations require that the owner of the building and/or the contractor notify applicable State and local agencies (i.e., Monterey Bay Unified Air Pollution Control District) and/or EPA Regional Offices before all demolitions, or before renovations of buildings that contain certain threshold amounts of asbestos.

The inspection report prepared by ATC Associates found evidence of asbestos-containing materials in floor tiles, flooring, exterior panels, duct tape and joint compound/tape, and roofing material at the Passenger Depot and Freight Depot (ATC Associates, 1998).

General Plan Goals, Objectives, and Policies

Table 3.6-1 identifies goals, objectives, and policies that provide guidance for hazardous materials and hazardous wastes treatment in the Project area. The table also indicates which evaluation criteria are responsive to each set of policies. The Monterey County General Plan written in 1982 is currently being updated but it has not yet been ratified by the Planning Commission and Board of Supervisors. Therefore, the 1982 Monterey County General Plan Goals, Policies, and Objectives were used for reference and disclosure.

Table 3.6-1

General Plan Goals, Objectives, and Policies
 Hazardous Materials and Hazardous Wastes

Plan Document	Document Section	Document Reference	Policies	Relevant Evaluation Criteria
Monterey County 1982 General Plan	Miscellaneous Hazards	Goal 18 Objective 18.1	Reduce the level of risk from hazardous chemicals to an acceptable level by regulating the storage of hazardous chemicals.	2
City of Salinas 2002 General Plan	Safety Element	Goal S-3	Protect the community from hazards related to air and ground transportation, hazardous materials, and air pollution, as well as other human activities.	1
City of Salinas 2002 General Plan	Safety Element	Policy S-3.2	Ensure that hazardous materials used in residential, business and industry are properly handled and that information on their handling and use is available to residents, fire protection and other safety agencies.	2, 3
City of Salinas 2002 General Plan	Safety Element	Policy S-3.7	Reduce the risk from ground transportation hazards, such as rail, truck, and roadway systems.	1

Source: Monterey County, 1982; City of Salinas, 2002.

3.6.4 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The following significance criteria were used to evaluate the hazardous materials and hazardous waste issues associated with the proposed Project (Table 3.6-2).

Table 3.6-2

Evaluation Criteria with Points of Significance
Hazardous Materials and Hazardous Wastes

Evaluation Criteria	As Measured by	Point of Significance	Justification
1. Will the Project create a hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	Increase in transport, use or disposal of hazardous materials not in accordance with State and Federal hazardous materials or waste regulations.	Greater than 0 occurrences	State and Federal hazardous materials and waste regulations; County General Plans, Hazardous Materials Element.
2. Will the Project create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials?	Use or storage of hazardous materials not in accordance with State and Federal hazardous materials regulations.	Greater than 0 occurrences	State and Federal hazardous materials regulations; County General Plans, Hazardous Materials Element.
3. Will the Project release hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Hazardous or acutely hazardous chemical emissions or handling within one-quarter mile of an existing or proposed school.	Greater than 0 occurrences	CEQA guidelines; California Accidental Release Prevention Law; Federal Emergency Preparedness and Community Right-to-Know Act [EPCRA]; Clean Air Act.
4. Will the Project expose workers or the public to hazards from a known hazardous waste site as identified pursuant to Government Code Section 65962.5 (Cortese List)?	Ground disturbance near a hazardous waste site(s).	Less than 500 feet	CEQA guidelines; Resource Conservation and Recovery Act; Comprehensive Environmental Response Compensation and Liability Act (as amended by the Superfund Amendments and Reauthorization Act)

Source: Parsons, 2005.

3.6.5 METHODOLOGY

The impact analysis is based on a review of relevant literature and technical reports concerning the project area.

3.6.6 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION MEASURES

IMPACT: **HM-1: Will the Project create a hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?**

Analysis: *Less than Significant, LPA and Alternate Castroville Passenger Station Site*

Minor amounts of fuels, motor oils, paints, and other hazardous materials would be used during construction and maintenance of the facilities. The small quantities of hazardous materials that would be transported, used and disposed are well below reportable quantities. Although fuels, motor oils, and paints have hazardous properties (fuels, for example, are flammable) they would be handled in small quantities that would not create a substantial hazard for workers and the public. Compliance with federal, State and local hazardous materials laws and regulations would minimize the risk to the public presented by these potential hazards.

Mitigation: No mitigation is necessary.

IMPACT: **HM-2: Will the Project create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials?**

Analysis: *Less than Significant, LPA and Alternate Castroville Passenger Station Site*

No chemicals regulated under California's Accidental Release Prevention Law or similar federal laws would be used during Project construction or operation. The types and quantities of other hazardous materials used during Project construction and operation, such as fuel, paint and motor oil, would not create a substantial hazard for the public or the environment.

Mitigation: No mitigation is necessary.

IMPACT: **HM-3: Will the Project release hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

Analysis: *Less than Significant, LPA and Alternate Castroville Passenger Station Site*

Pajaro Middle School is within one-quarter mile of the proposed Pajaro station site. North Monterey County High School is about three-quarters mile northeast of the proposed Castroville station site. Sacred Heart School is within one-quarter mile of the proposed Salinas rail passenger station, parking facility expansion, bus station and proposed layover sites; Hartnell College is about one-half mile away. However, construction and project activities would not release hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste as defined by federal and State accidental release prevention laws. Therefore, the Project does not exceed the point of significance for this criterion.

Mitigation: No mitigation is necessary.

IMPACT: HM-4: Will the Project expose workers or the public to hazards from a known hazardous waste site as identified pursuant to Government Code Section 65962.5 (Cortese List)?

Analysis: *Significant, LPA and Alternate Castroville Passenger Station Site*

Proposed construction activities that could be affected by reported releases of hazardous materials at the three proposed stations include clearing, grading and excavating. These activities require soil excavation and possibly dewatering, which may expose or otherwise encounter hazardous materials. Specific project impacts resulting from encountering hazardous materials include potential exposure of workers and the public to toxic materials, further contamination of air, soil and water, and removal and/or disposal of hazardous materials. The latter requires transportation of contaminated material, getting waste accepted for disposal, and management of contaminated groundwater.

The potential for reported releases of hazardous materials to impact project construction activities depends on several factors. These include the location of the reported release relative to proposed construction activities; the nature of the construction activities; the source, nature and extent of contamination; the impact to groundwater of the reported release; and the hydrogeologic conditions in the vicinity of the reported release. Specific impacts to soil and/or groundwater at a given location as a result of nearby contaminant releases will require additional research, such as a Phase I and/or a Phase II Site Assessment.

An asbestos survey may be required in order to demolish the existing Pajaro station building. This would be commissioned and paid for by the County before the start of demolition. Analysis of impacts would be addressed in a supplement to the EIR.

Any requirements for disposal of contaminated soil and water shall be determined before the start of construction. The contractor shall be informed of any sites in the construction area and shall be responsible for implementing the construction-period mitigation measures described below, as necessary.

Mitigation: **HM-1a: Update Phase I Site Assessment summarizing reported releases of hazardous materials within the project area prior to construction.**

Because site conditions can change over time (new releases may occur and remedial activities may be initiated or completed) an updated Phase I Site Assessment that summarizes the reported releases of hazardous materials within the project area shall be prepared by TAMC within one year of the start of construction. Additional investigations (*e.g.*, Phase II Site Investigation) shall be performed, as necessary, to determine the nature and extent of any suspected contamination identified by the Phase I study. The Phase I Site Assessment may include a review of regulatory agency case files, a site survey of the project area and contacting property owners, property operators, or the lead agency providing oversight of the ongoing investigations or remediation to determine the site's current status. A Phase II Site Investigation (*e.g.*, collection of soil or groundwater samples) shall be performed in areas where the Phase I Site Assessment indicates that contaminants may be present in soil or groundwater.

Mitigation: **HM-1b: Monitor soil and groundwater during construction for evidence of hazardous waste.**

During construction the excavation or exposure of soil in areas suspected of containing soil or groundwater contamination shall be monitored by the contractor for subsurface contamination in compliance with the California Department of Occupational Safety and Health Administration (Cal/OSHA). This monitoring would, at a minimum, include visual observation by personnel with appropriate hazardous materials training, including 40 hours of Hazardous Waste Operations and Emergency Response (HAZWOPER) training as required by Cal/OSHA for workers engaged in hazardous waste operations.

Mitigation: **HM-1c: Containerize and test suspect soil and groundwater prior to disposal.**

In areas where contamination of soil and groundwater is suspected, groundwater brought to the surface as a result of construction dewatering shall be contained by the construction contractor in Baker tanks or similar containment devices. At a minimum, this would allow the suspended solids associated with dewatering to settle out before discharge, if discharge is allowable. Depending on the proximity to known contaminated plumes, and the probability of groundwater being contaminated based on visual or other evidence, samples shall be collected and analyzed. A State of California certified hazardous waste laboratory using EPA-approved analytical methods shall perform the laboratory analyses. The types of analyses shall be based on the likely contaminant(s) and on local permitting requirements. All discharges of dewatered groundwater will be subject to waste discharge requirements (WDR) set by the RWQCB.

TAMC shall obtain any required WDR permits and incorporate permit requirements in the construction documents so that groundwater discharge restrictions can be included in contractor's scope of work.

All potentially contaminated materials encountered during project construction activities shall be evaluated in the context of applicable local, state and federal regulations and/or guidelines governing hazardous waste. All materials deemed to be hazardous shall be remediated and/or disposed of following applicable regulatory agency regulations and/or guidelines. All evaluations, remediation, treatment and/or disposal of hazardous waste shall be supervised and documented by qualified hazardous waste personnel (having received a minimum of 40 hours HAZWOPER training).

Mitigation: **HM-1d: Inspect and Test for ACM and lead-based paint.**

Prior to construction, TAMC shall inspect (and test as necessary) all buildings subject to demolition and/or remodeling for ACM and lead-based paint. Certified inspectors and consultants shall perform the work. The applicant shall notify the Monterey Bay Unified Air Pollution Control District before demolition commences if the asbestos survey identifies ACM exceeding threshold amounts specified in state regulations. Certified contractors shall perform any required remediation in accordance with best management practices.

After

Mitigation: *Less than Significant, LPA and Alternate Castroville Passenger Station Site*

Identification and proper management of any contaminated soil or groundwater would mitigate impacts to a less than significant level.

3.6.7 CUMULATIVE IMPACTS

IMPACT: HM-C1: Will the project have the potential to have a cumulative impact on hazardous materials or hazardous waste management?

Analysis: Less than Significant, LPA and Alternate Castroville Passenger Station Site

The Project would not contribute to any significant cumulative impacts associated with hazardous materials use or existing hazardous waste sites because potential impacts that could occur during construction can be fully mitigated. No long-term impacts associated with the operation of the Project are expected. Hazardous materials and hazardous waste would be managed in compliance with federal, State and local laws and regulations.

3.6.8 CONCLUSION

With implementation of the above-referenced mitigation measures, impacts from hazardous wastes and materials would be reduced to less than significant.

3.6.9 REFERENCES

ATC Associates, Inc., 1998. Asbestos, Lead-based Paint and PCBs Inspection Report for 11 Station Place, Salinas, California. June 3.

City of Salinas, 2002. City of Salinas General Plan.

Industrial Compliance. 1992. Site Investigation and Storage Tank Removal Report, Southern Pacific Transportation Company Property, Watsonville Railyard, Watsonville, California. May 14.

Industrial Compliance. 1994. Phase II: Site Investigation Workplan, Southern Pacific Transportation Company, Watsonville Junction Yard, 499 Salinas Road, Watsonville, California. February 11.

Monterey County. 1982a. *Monterey County General Plan*, adopted by the Board of Supervisors, September 30.

Parikh Consultants, Inc. 2002a. Initial Environmental Site Assessment Proposed Caltrain Extension Project, Pajaro, Monterey County, California. October.

Parikh Consultants, Inc. 2002b. Initial Environmental Site Assessment Proposed Caltrain Extension Project, Castroville Station, Monterey County, California. October.

Parikh Consultants, Inc. 2002c. Initial Environmental Site Assessment Proposed Caltrain Extension Project, Salinas, Monterey County, California. November.

Parikh Consultants, Inc. 2005. Initial Environmental Site Assessment Proposed Caltrain Extension Project, Salinas, Monterey County, California. August.

3.7 HYDROLOGY AND WATER QUALITY

3.7.1 INTRODUCTION AND SUMMARY OF IMPACTS

This section analyzes project-related water quality, surface and groundwater hydrology, and flood plain impacts to the surrounding waterways that may result due to both short-term construction activities and project operational activities.

A summary of hydrologic and water quality impacts is presented below. Full analyses of the impacts are included in Section 3.7.6.

<i>IMPACT</i>	<i>SIGNIFICANCE BEFORE MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>SIGNIFICANCE AFTER MITIGATION</i>
HYDRO-1: Will the Project violate any surface water or groundwater quality standards or waste discharge requirements or cause a substantial degradation of surface runoff quality?	Less than significant	No mitigation necessary.	Less than significant
HYDRO-2: Will the Project cause water-related erosion or siltation on- or off-site?	Less than significant	No mitigation necessary.	Less than significant
HYDRO-3: Will the Project cause increased runoff or flooding?	Less than significant	No mitigation necessary.	Less than significant
HYDRO-4: Will the Project create or contribute stormwater that would exceed the capacity of existing or planned stormwater drainage systems?	Less than significant	No mitigation necessary.	Less than significant
HYDRO-5: Will the Project deplete groundwater supplies or interfere with groundwater recharge?	Less than significant	No mitigation necessary.	Less than significant
HYDRO-6: Will the Project imperil people or structures by causing flooding, including inundation due to levee or dam failure?	Less than significant	No mitigation necessary.	Less than significant
HYDRO-7: Will the Project place structures or housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	Less than significant	No mitigation necessary.	Less than significant
HYDRO-C1: Will the project have significant cumulative impacts to hydrology and water quality?	Less than significant	No mitigation necessary.	Less than significant

3.7.2 ENVIRONMENTAL SETTING

Description of Proposed Project Sites

Pajaro Passenger Station at Site #1 (Watsonville Junction)

The project site is the Pajaro Valley, which is hydrologically influenced by the Pajaro River. At this reach along the river, flows are contained by agricultural levees which have failed most recently in 1995 and 1998¹, following 100-year flood events. As a result, the community of Pajaro and the UPRR yard at Watsonville Junction (including the site of the proposed passenger rail platform) were inundated with several feet of water. The Federal Emergency Management Administration (FEMA) has mapped the site in the 100-year floodplain as Zone A6, which means inundation with up to six feet of floodwater during a 100-year event. The site is located on FEMA Flood Insurance Rate Map (FIRM) panel 060195-0005D. In general, drainage at the site flows westerly to a drainage system in Salinas Road. Elevations at the site are between 7.5 to 8 meters (25 to 26 feet) above mean sea level while the 100-year flood elevations vary from approximately 25.5 to 26.5 feet (flowing in a westerly direction).

Castroville Passenger Station at Site #1 and Site #2

The community of Castroville is located in the Salinas drainage basin. The Salinas drainage basin is bound by the La Panza Range to the south, the Santa Lucia Range to the southwest, the Sierra de Salinas to the northwest; and the Diablo and Gabilan Ranges to the northeast (USGS 2006). The area is divided among numerous watersheds, or basins, that eventually consolidate at the Salinas River, Pajaro River, and Elkhorn Slough for release into Monterey Bay (Monterey County 1985). The Moro Cojo, Tembladero, and Merritt basins surround the area around Castroville. All of these basins consolidate drainage into the Monterey Bay at Moss Landing Harbor.

Castroville is located in the Lower Salinas River Watershed, which encompasses the area north of Bradley to the Monterey Bay. The Lower Salinas River watershed overlies the Salinas Groundwater Basin and is entirely within Monterey County. The dominant land use in the Lower Salinas River Watershed is agriculture with irrigated cropland as the most predominant use.

Two alternative sites have been evaluated for the Castroville Passenger Station. The LPA for the Castroville Passenger Platform Site is Site #2, which is located adjacent to the northern portion of Castroville, along the north side of State Route 156, at the south edge of an agricultural swale which flows northwesterly to the Moro Cojo Slough. This slough is a part of the Elkhorn Slough National Estuarine Preserve being managed by the National Oceanic and Atmospheric Administration (NOAA). The Castroville Passenger Platform Site #1 is located south of Site #2 in Castroville at Blackie Road, which places it outside the 100-year Zone A flood plain, and in an area designated as Zone B (between

¹ In the 1998 event, the entire town of Pajaro was evacuated (Monterey County Water Resources Agency, Historical Flooding; www.mcwra.co.monterey.ca.us).

the 100-year and 500-year flood). Here, the drainage leads through a drainage network that conveys flow toward the Moro Cojo Slough.

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Castroville sits on a slight ridge between the Tembladero and Castroville Sloughs, which are the primary receiving waters for surface water in the community of Castroville. The area south of Blackie Road drains into the Tembladero Slough. The area north of Blackie Road drains to either the Tembladero or Castroville Sloughs. The Tembladero Slough borders the southeast side of the existing community boundary and is the primary drainage for the Gabilan Creek watershed, which originates near Fremont Peak in the Gabilan Range (H.T. Harvey and Associates 2003). The Castroville Slough begins at a retention pond located on the east side of Castroville near the overpass of Highway 156 and railroad tracks. Both the Tembladero and Castroville Sloughs are influenced by tides, which in turn impact the stormdrain system of Castroville.

County Service Area 14 (CSA-14) owns and maintains the local storm drainage system for the developed areas of Castroville. Monterey County Department of Public Works currently manages and operates CSA-14, however Castroville Water District (CWD) is expected to take ownership for the storm drainage and wastewater collection system March 2006. Funding for storm drain facilities is funded by annual property tax revenues.

The Final Storm Drain Master Plan CSA-14 (Monterey County 2001) addresses the adequacy of the existing storm drain piping system. It defines the major drainage systems as Systems A through F. Storm water from drainage systems A, C, and D discharge into the Castroville Slough. Approximately half of System D discharges to an existing detention pond near the railroad tracks between the end of Cara Mia Parkway (soon to be renamed Ocean Mist Parkway) and Highway 156 within the existing industrial park. This detention pond eventually drains to the Castroville Slough via a culvert under Highway 156. Drainage systems B, E, and F directly discharge to the Tembladero Slough.

A Capital Improvement Program (Monterey County 2004-2005) and the Final Storm Drain Master Plan CSA-14 identify needed storm drain improvement projects. One of the identified improvement projects that has not yet been completed is the “Highway 156/Railroad overcrossing.” The “Highway 156/Railroad overcrossing” capital improvement project would improve an inefficient twin culvert system under Highway 156 by replacing the existing drainage ditches with storm drain pipes and connecting them directly to the twin culverts, thus attempting to reduce flooding at a nearby apartment complex. Caltrans has placed design requirements on this project to ensure that the improvements will reduce flooding and not just displace it. However, the project has been delayed indefinitely due to limited funding and increased project costs.

Surface Water Quality

Castroville Slough is the primary receiving water for the surface water emanating from the proposed Castroville station sites (#1 and #2) and is managed by the Monterey County Water Resources Agency (MCWRA). The Castroville Slough is a tributary of the Moro Cojo Slough, which discharges to the Monterey Bay via Elkhorn Slough. Surface runoff from urban and agricultural uses are the primary sources of contaminants in the Tembladero and Castroville Sloughs. The Castroville Slough is a tributary of the Moro Cojo Slough. Contaminates found in Moro Cojo Slough may be also found in the Castroville Slough, just not at the same levels. The Moro Cojo is a water body that only partially supports beneficial uses, due to elevated levels of nutrients, sediment, and organic pesticides in fish, shellfish, and sediments. Water quality data is not monitored for the Castroville Slough.

A majority of the soils in Castroville are 0 to 10 percent slopes and are not susceptible to severe erosion. However, severe erosion and sedimentation are prevalent on the strawberry fields located on the steep sandy hills east of Castroville. The sedimentation from these agricultural fields frequently affects the drainage ways of the Castroville Sloughs.

Flooding Potential

Major flooding usually occurs during three types of events: severe weather storm causing a river or stream to crest above flood level, dam failure that sends a surplus of water downstream or Tsunami induced wave action driving ocean water onshore and upstream of rivers that flow to the ocean.

Most of the urbanized area of Castroville lies outside of the FEMA 100-year floodplain and is designated as Zone B, between the limits of the 100-year and 500-year flood area, as shown in Figure 3.9-1. However, there are areas adjacent to Castroville Slough that are located in an approximate 100-year floodplain (Schaaf & Wheeler 2005).

FEMA has mapped Castroville Site #2 in the 100-year Zone A floodplain which means inundation of an indeterminate depth of floodwater would occur during a 100-year event. The site is located on FEMA FIRM panel 060195-0055F. In general, drainage at the site flows northerly to the agricultural swale, which is aligned in a northeasterly direction.

Elevations at the site are between 1.5 meters (5 feet) on the west side of the site to 7 meters (23 feet) on the south east side of the site. The 100-year flood elevation is depicted to be approximately 13 feet on the FIRM map. A FEMA Zone A designation indicates an approximate 100-year floodplain, meaning a detailed study has not been performed, therefore base flood elevations and flood hazard factors are not available.

The Castroville Passenger Platform Site #1 is located south of Site #2 in Castroville at Blackie Road, which places it outside the 100-year Zone A flood plain, and in an area designated as Zone B (between the 100-year and 500-year flood). Here, the drainage leads through a drainage network that conveys flow toward the Moro Cojo Slough.

Castroville Stormwater Pump Station

Monterey County Water Resource Agency (MCWRA) owns and operates a small storm water pump station located northwest of Castroville, downstream of the Castroville Site #2 proposed rail station. This station lifts flows of the Castroville Slough into a tributary of Moro Cojo Slough. The Castroville pump station's existing pumps require excessive repairs and the station does not meet the modern design and construction standards normally expected of a public storm water pumping facility (Schaaf & Wheeler 2005). The MCWRA is planning an upgrade with construction scheduled to be complete in the Fall of 2006. The current pumping capacity of 16,000 gpm will not be increased as part of the upgrade, due to channel capacity limitations downstream. A single 40-hp pump is adequate to convey the flow capacity and dewater the upstream area.

Tottino (Adjacent to Castroville Site #2 Area)

The Tottino subarea drains to the Castroville Slough upstream of the Castroville Pump Station. Discharge to the Castroville Slough will be limited to the 10-year and 2-year pre-development flow rates through onsite detention. The detention could be accomplished through a single basin or dispersed into several basins. The existing wetland to be restored as part of the resource enhancements component of the proposed Community Plan would not to be used for on-site detention of storm water. This wetland area shall only receive storm water from Salinas Street, the existing sub-system C of the Castroville storm drain collection system, and the existing Highway 156 culvert.

Based on the analysis conducted by Schaaf and Wheeler, through grading, a majority of the Tottino subarea may drain to the 200-foot wide agricultural buffer north of the train station site while a portion would drain toward the train station. After detention, the runoff would be released into Castroville Slough. A stormwater pump station would be required to handle storm water flow collected in the railroad tracks within the pedestrian/emergency vehicle underpass.

Castroville Site #2 Train Station Area

Full build out of the Commuter Train Station at Site #2 would increase runoff to the Castroville Slough, therefore would require detention and construction of new drainage systems to limit flow to the existing Castroville Pump Station located downstream on the Castroville Slough. Discharge to the Castroville Slough will be limited to the 10-year

and 2-year pre-development flow rates through onsite detention. As with the Tottino area, the detention basin may be a single basin, dispersed into several basins, or detained within the agricultural buffer along the northern boundary of the site area. A culvert would have to be constructed under the railroad tracks to allow storm water to discharge into the Castroville Slough.

Salinas Layover Yard Facility at Site #2 and the Intermodal Transportation Center Expansion

The site of the proposed Salinas Layover Yard Facility and passenger platform is adjacent to (approximately 200 to 500 feet south of) Reclamation Ditch 1665, a drainage ditch operated and maintained by the Monterey County Water Resources Agency. The drainage ditch conveys storm water flow northwesterly, outleting into the Tembladero Slough, which connects to the Moro Cojo Slough described above. Located near the Salinas Intermodal Transportation Station, the site is not a part of the FEMA 100-year floodplain. Runoff from the site is intercepted and routed through a drainage network consisting of a series of catch basins and storm drains that convey the flow northerly to Reclamation Ditch 1665. Elevations at the site range from 13 to 16 meters (42 to 52 feet) above mean sea level whereas the adjacent reclamation ditch exhibits flows that can vary from 8 to 12 meters (26 to 39 feet) above mean sea level.

Description of Hydrology in the Project Area

Groundwater

Northern Monterey County has been identified as having significant water supply and water quality problems, including falling groundwater levels, seawater intrusion, and nitrate contamination. Previous reports have documented the North County study area as having chronic overdraft (Fugro West 1995). In accordance with the Central Coast RWQCB Basin Plan (1994), the Pajaro site is within the Pajaro hydrologic unit (in the Watsonville hydrologic sub-area 305.10), while the Salinas and Castroville sites are in the northern segment of the Salinas hydrologic unit (in the Lower Salinas Valley hydrologic sub-area 309.10). Groundwater basins within these units include the Pajaro Valley and Salinas Valley Groundwater Basins (the latter sites overlying the 180-foot and 400-foot aquifers of the Salinas Valley Basin). Water quality objectives for these basins include total dissolved solids ranging from 400 to 1500 mg/l and nitrates ranging from 1 to 5 mg/l. None of the project sites are in an area defined as an important recharge area. The aquifer in the project area is confined and most recharge takes place through the Salinas and Pajaro Rivers.

Surface Water

The Basin Plan identifies the Moro Cojo Slough and the interconnected Tembladero Slough as having beneficial uses for recreational and groundwater uses, for wildlife and fresh water habitat, for spawning and fishing and for habitat of rare, threatened or endangered species. The reclamation ditch that intercepts and conveys flow from the Salinas site to the Tembladero Slough has beneficial uses that include recreation, wildlife

and freshwater habitat and fishing. The Pajaro River has beneficial uses for municipal, agricultural, industrial, groundwater and recreational uses; for freshwater, wildlife and migratory bird habitat; and for spawning and fishing.

The 2002 Clean Water Act Section 303(d) List of Impaired Water Bodies includes the Moro Cojo Slough (for dissolved oxygen, pesticides and sedimentation), the Pajaro River (for coliform bacteria, nutrients and sedimentation) and the Salinas Reclamation Ditch (for coliform bacteria, dissolved oxygen, nitrate, pesticides and organics). Impacts to consider include furthering the water quality degradation of these listed water bodies and/or impacting the beneficial uses for the water bodies described above.

Flood Plain

The Pajaro and Castroville sites are located within floodplains designated in FEMA flood maps. Any fill or structures placed as part of the project in these floodplains must be analyzed to assess impacts to the flood plain water surface. New or substantially improved structures must also comply with all applicable federal, state, and local freeboard requirements to address floodplain management protection standards.

3.7.3 REGULATORY SETTING

National Pollutant Discharge Elimination System Permit

The Federal Clean Water Act (CWA) regulates the discharge of stormwater from construction sites. The State Water Resources Control Board (SWRCB) has obtained a National Pollutant Discharge Elimination System (NPDES) General Permit (No. CAS000002) for discharge of stormwater runoff associated with construction activities. Construction activities include clearing, grading, or excavation that results in soil disturbance of at least five acres of total land area. Construction activities that result in soil disturbance of less than five acres require a permit if the construction activity is part of a larger common plan of development. The owner of the land where construction would occur is responsible for obtaining coverage under the statewide General Permit and is required to file a Notice of Intent for each construction activity prior to commencement of construction. The General Permit requires development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) and identification of a monitoring program and reporting requirements. The Storm Water Pollution Prevention Plan as specified in the General Permit (from SWRCB Fact Sheet) must include:

1. A description of soil stabilization practices. These practices shall be designed to preserve existing vegetation where feasible and to revegetate open areas as soon as feasible after grading or construction. In developing these practices, the discharger shall consider: temporary seeding, permanent seeding, mulching, sod stabilization, vegetation buffer strips, protection of trees, or other soil stabilization practices. At a minimum, the operator must implement these practices on all disturbed areas during the rainy season.
2. A description or illustration of control practices which, to the extent feasible, will prevent a net increase of sediment load in stormwater discharge. In developing control practices,

the discharger shall consider a full range of erosion and sediment controls such as detention basins, straw bale dikes, silt fences, earth dikes, brush barriers, velocity dissipation devices, drainage swales, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, sediment traps, temporary sediment basins, or other controls. At a minimum, sandbag dikes, silt fences, straw bale dikes, or equivalent practices are required for all significant sideslope and downslope boundaries of the construction area. The discharger must consider site-specific and seasonal conditions when designing the control practices.

3. Control practices to reduce the tracking of sediment onto public or private roads. These public and private roads shall be inspected and cleaned as necessary.
4. Control practices to reduce wind erosion.

In 1990, the U.S. EPA published final regulations that established application requirements for storm water permits for municipal separate storm sewer systems (MS4s) serving a population of over 100,000 (Phase I communities) and certain industrial facilities, including construction sites greater than five acres. In 1999, the U.S. EPA published the final regulations for communities with population under 100,000 (Phase II MS4s) and operators of construction sites between one and five acres. Phase I MS4s are required to obtain an individual NPDES storm water permit and develop a storm water management plan (SWMP) that is implemented by the municipality's storm water management program. One of the elements of the municipal NPDES Storm Water Program are new development and redevelopment activities including: planning processes, design review, Best Management Practices (BMPs), outreach and enforcement. Smaller, Phase II communities are covered by a General Permit. Six Phase II measures are required in Phase II permits. One addresses post-construction storm water management in new development and redevelopment, including developing, implementing, and enforcing a program to address discharges of storm water runoff from new and redevelopment areas. Phase I permits and the Phase II General Permit in California contain standard requirements for planning and design BMPs including minimum requirements for treatment of runoff from new development. These standards are called Standard Urban Stormwater Mitigation Plans (SUSMPs) in some permits, or equivalent terminology is used in others (California Stormwater Quality Association, 2003). This project would be subject to such requirements and would be regulated through the County and the RWQCB.

Regional Water Quality Control Board

The Central Coast RWQCB through its Basin Plan plays a key role in the protection of sensitive environments from water pollution including train spills, and non-point sources of pollution. Because runoff from all three sites: Pajaro, Castroville, and Salinas leads to Monterey Bay, the National Oceanic and Atmospheric Administration is one of the regional water quality stakeholders. At the Castroville and Salinas sites, an added involvement with NOAA exists because the proposed sites are within the watershed of Moro Cojo Slough.

Executive Order 11988 (Flood Plain Management)

This project falls under Executive Order 11988 (Floodplain Management) which directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. The Federal Railroad Administration (FRA) requirements for compliance are outlined in their “Procedures for Considering Environmental Impacts” which references the Department of Transportation (DOT) Order 5650.2. In order to comply, the following must be analyzed:

- Base floodplain limits,
- Risks of the action,
- Impacts on natural and beneficial floodplain values,
- Support of incompatible floodplain development, and
- Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values impacted by the project.

The 100-year floodplain is considered the “Base” floodplain and is defined as the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year. An encroachment is defined as “an action within the limits of the base floodplain.”

Coastal Permit

The North County Land Use Plan (Local Coastal Program) contains a permit requirement to ensure the appropriate siting and density for new development, and to monitor the amount of land disturbance in relation to the Land Disturbance Target consistent with the Local Coastal Program certified by the Coastal Commission. This permit would apply to development of the Castroville sites, which are in the watershed of Moro Cojo Slough.

Erosion Control Ordinance

Monterey County has enacted an Erosion Control Ordinance to eliminate and prevent conditions of accelerated erosion which could lead to the degradation of water quality, loss of fish habitat, damage to property, loss of topsoil or vegetative cover, disruption of water supply, and increased danger from flooding. The Erosion Control Ordinance contains provisions for the regulation of project design, an erosion control plan for runoff control, for land clearing, and winter operations.

Groundwater Management

The Monterey County Water Resources Agency has implemented the planning process for its Salinas Valley Water Project to alleviate chronic problems of overdraft, nitrate contamination, and seawater intrusion in the Salinas Valley. Its sister agency, the Pajaro Valley Water Management Agency, is planning to address similar problems in the lower Pajaro Valley. Further water quality degradation or additional groundwater consumption at any of the proposed sites would constitute an impact within these areas and require regulatory oversight by these agencies.

Floodplain Development

Monterey County Water Resources Agency (WRA) has implemented regulations for floodplain development in Monterey County, which are contained in Chapter 16.16 of Monterey County Code. Development within the 100-year floodplain or within 200 feet of the riverbank requires a Use Permit from the Monterey County Planning and Building Inspection Department. As defined in County Code, development means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations.

Protection measures that would apply to the proposed project include the following:

- Construct or modify retaining walls with proper drainage.
- Construct berms to divert water flows.
- Install debris fences or traps.
- Construct on-site detention basins
- Improve headwalls for water conveyance.
- Floodproof retaining walls and entrances.
- Add sump pump to drainage systems.
- Construct terrace drain and plant slopes to reduce erosion and water flows.
- Improve on-site grading and add french-drain.
- Elevate the lowest floor a minimum of to the base flood elevation (non-residential).

General Plan Goals, Objectives, and Policies

Table 3.7-1 identifies goals, objectives, and policies that provide guidance for hydrology and water quality issues in the Project area. The table also indicates which evaluation criteria are responsive to each set of policies.

Table 3.7-1

General Plan Goals, Objectives, and Policies
Hydrology and Water Quality

Plan Document	Document Section	Document Reference	Policies	Relevant Evaluation Criteria
Monterey County 1982 General Plan	Chapter I, Area Natural Resources, Objectives and Policies for Water Resources	Goal 5 Policy 5.1.2	Land use and development shall be accomplished in a manner to minimize runoff and maintain groundwater recharge in vital water resource areas.	1, 3, 5
Monterey County 1982 General Plan	Chapter II, Environmental Constraints, Objectives and Policies for Flood Hazards	Goal 16 Policy 16.2.1	The County's primary means of minimizing risk from flood hazards shall be through land use planning and the avoidance of incompatible structural development in flood prone areas.	7
Monterey County 1982 General Plan	Chapter II, Environmental Constraints, Objectives and Policies for Flood Hazards	Goal 16 Policy 16.2.3	All new development for which a discretionary permit is required, including filling, grading, and construction, shall be prohibited within 200 feet of the riverbank or within the 100-year floodway except as permitted by ordinance.	7
Monterey County 1982 General Plan	Chapter II, Environmental Constraints, Objectives and Policies for Flood Hazards	Goal 16 Policy 16.2.4	All new development, including filling, grading, and construction, within designated 100-year floodplain areas shall conform to the guidelines of the National Flood Insurance Program and policies established by the County Board of Supervisors, with the advice of the Monterey County Flood Control and Water Conservation District.	7
Monterey County 1982 General Plan	Chapter II, Environmental Constraints, Objectives and Policies for Flood Hazards	Goal 16 Policy 16.2.5	All new development, including filling, grading, and construction, proposed within designated floodplains shall require submission of a written assessment prepared by a qualified hydrologist/engineer on whether the development will significantly contribute to the existing flood hazard. Development shall be conditioned on receiving approval of this assessment by the County Flood Control and Water Conservation District.	7

Table 3.7-1

General Plan Goals, Objectives, and Policies
 Hydrology and Water Quality

Plan Document	Document Section	Document Reference	Policies	Relevant Evaluation Criteria
Monterey County 1982 General Plan	Chapter II, Environmental Constraints, Objectives and Policies for Water Quality	Goal 21 Policy 21.2.1	The County shall require all new and existing development to meet federal, state, and County water quality regulations.	1
Monterey County 1982 General Plan	Chapter II, Environmental Constraints, Objectives and Policies for Water Quality	Goal 21 Policy 21.2.3	Residential, commercial, and industrial developments which require 20 or more parking spaces shall include oil, grease, and silt traps, or other suit able means, as approved by the Monterey County Surveyor, to protect water quality; a condition of maintenance and operation shall be placed upon the development.	1

Source: Monterey County, 1982.

3.7.4 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The following significance criteria were used to evaluate the hydrological impacts associated with the proposed Project (Table 3.7-2). These criteria are drawn from a review of the relevant literature on hydrology and surface water resources. These include CEQA Guidelines, Appendix G, Clean Water Act Regulations and General Permit requirements for construction activities, and the Monterey County General Plan.

Table 3.7-2

Evaluation Criteria with Point of Significance
Hydrology and Water Quality

Evaluation Criteria	As Measured by	Point of Significance	Justification
1. Will the Project violate any surface water or groundwater quality standards or waste discharge requirements or cause a substantial degradation of surface runoff quality?	Compliance with state and federal water quality regulations and with local and state storm water quality regulations requiring implementation of effective Best Management Practices	Failure to implement effective, reasonable and appropriate measures	State of California General NPDES Permits for Discharges of Storm Water Associated with Construction and Industrial Activities CEQA Guidelines, Appendix G Monterey County 1982 General Plan
2. Will the Project cause water-related erosion or siltation on- or off-site?	Construction activities not in compliance with NPDES or building and grading codes	Any occurrence	Clean Water Act regulations and local building codes CEQA Guidelines
3. Will the Project cause increased runoff or flooding?	Impervious surface Impedance of surface water flows	Substantial increase in impervious surface Any impedance of stream, creek or other drainage	CEQA Guidelines Monterey County 1982 General Plan
4. Will the Project create or contribute stormwater that would exceed the capacity of existing or planned stormwater drainage systems?	Stormwater flows	An increase that exceeds the capacity of existing facilities	CEQA Guidelines

Table 3.7-2

Evaluation Criteria with Point of Significance
 Hydrology and Water Quality

Evaluation Criteria	As Measured by	Point of Significance	Justification
5. Will the Project deplete groundwater supplies or interfere with groundwater recharge?	Groundwater use Addition of impervious surface	Use of groundwater in excess of that anticipated in local water management plans Construction in important recharge area	CEQA Guidelines Monterey County 1982 General Plan
6. Will the Project imperil people or structures by causing flooding, including inundation due to levee or dam failure?	Increased risk of inundation due to proposed element(s) not in compliance with State's dam safety standards.	Any occurrence	Standards set by the California Department of Water Resources Division of Safety of Dams CEQA Guidelines
7. Will the Project place structures or housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	Structures in the flood plain	Any occurrence	Standards set by the California Department of Water Resources Division of Safety of Dams CEQA Guidelines Monterey County 1982 General Plan

3.7.5 METHODOLOGY

The impact analysis is based on a review of relevant literature and technical reports concerning the project area. Criteria used in evaluating water quality impacts are based on the 2002 State CEQA Guidelines and the 1994 Basin Plan for the Central Coast Region. Criteria used in evaluating flood plain impacts are based on the Federal Executive Order 11988 (Floodplain Management).

3.7.6 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION MEASURES

IMPACT: **HYDRO-1: Will the Project violate any surface water or groundwater quality standards or waste discharge requirements or cause a substantial degradation of surface runoff quality?**

Analysis: *Less than significant, LPA and Alternate Castroville Passenger Station Site*

The project would incorporate temporary and permanent pollution prevention measures and BMPs that reduce discharges of pollutants of concern at each site. The project would include development of a Storm Water Pollution Prevention Plan in compliance with the General Permit for construction sites to ensure that construction does not result in degradation of water quality. Permanent treatment BMPs such as biofiltration swales, detention basins, and/or catch basin filter inserts would be incorporated into the design to reduce potential pollutants such as sediment, metals, nutrients, organics and oil. Due to the sensitivity of the underlying groundwater basins at all locations, the use of infiltration basins for water pollution control is not anticipated. The incorporation of the permanent BMPs into the site's drainage system should result in an improvement in water quality from the site runoff at all sites as it enters into the adjacent surface waters. In addition, a storm water management plan would be prepared that would emphasize the use of source reduction measures including preventative maintenance, chemical substitution, spill prevention, housekeeping, pollution prevention training and materials management. Finally, source control measures such as material segregation or covering, water diversion and dust control would be included in the plan to keep pollutants out of the storm water. With adherence to these pollution prevention measures, no further mitigation related to water quality would be required for either groundwater or surface water.

Mitigation: No mitigation is necessary.

IMPACT: **HYDRO-2: Will the Project cause water-related erosion or siltation on- or off-site?**

Analysis: *Less than significant, LPA and Alternate Castroville Passenger Station Site*

The site designs would include erosion control measures to address site soil stabilization and reduce deposition of sediments in the adjacent surface waters. Typical measures include the application of soil stabilizers such as hydroseeding, netting, erosion control mats, rock slope protection and others. During construction other erosion control procedures would be used such as the use of mulch on all disturbed areas, the use of fiber rolls along slopes, the use of silt fences at the boundaries of the construction site, stabilized construction entrances and exits equipped with tire washing capability, and check dams placed strategically to reduce flow velocity and to filter flows in defined drainage-ways.

Mitigation: No mitigation is necessary.

IMPACT: HYDRO-3: Will the Project cause increased runoff or flooding?

Analysis: *Less than significant, LPA and Alternate Castroville Passenger Station Site*

The proposed projects would all result in a minor increase in impervious surface in the project areas. This can be expected to translate into minor localized increases in urban runoff. This increase could result in an impact on the peak storm flow of the receiving waterbody (which would be the Pajaro River, the Moro Cojo Slough and the Salinas Reclamation Ditch for the Pajaro, Castroville and Salinas platforms and station, respectively). Due to the lag time between the peak runoff from the receiving water body's watershed and that from the project sites, the peak flow from the sites would have substantially subsided by the time the respective watershed peaks occurs. This, coupled with the minor increases in impervious surface at the various sites results in an insignificant increase in peak flow of the receiving water bodies due to this project.

Mitigation: No mitigation is necessary.

IMPACT: HYDRO-4: Will the Project create or contribute stormwater that would exceed the capacity of existing or planned stormwater drainage systems?

Analysis: *Less than significant, LPA and Alternate Castroville Passenger Station Site*

Stormwater is currently intercepted and conveyed from the project sites to the receiving waters through existing drainage systems. Changes to these drainage systems would be minimal and the location of conveyance outlets to the receiving waters would be unchanged. Modifications to the existing drainage systems would enhance the conveyance and quality of the stormwater outleting to the receiving waters. Site drainage for project facilities would be directed either into detention basins or, in Salinas, into the municipal stormwater system.

Mitigation: No mitigation is necessary.

IMPACT: HYDRO-5: Will the Project deplete groundwater supplies or interfere with groundwater recharge?

Analysis: *Less than Significant, LPA and Alternate Castroville Passenger Station Site*

Groundwater usage is not anticipated for any of the project facilities and no groundwater impacts related to depletion of groundwater resources are anticipated. None of the sites is located in an important recharge area, and both the Pajaro and Salinas sites are located in existing developed areas, which are already covered with impervious surface.

Mitigation: No mitigation is necessary.

IMPACT: HYDRO-6: Will the Project imperil people or structures by causing flooding, including inundation due to levee or dam failure?

Analysis: *Less than Significant, LPA and Alternate Castroville Passenger Station Site*

The project would not cause flooding and does not include construction or modification of any levees or dams. Although the existing levee on the Pajaro

River has failed in the past, the project would not increase the risk of flooding as there would be no impact on the levee. In addition, property protection measures as required by Monterey County WRA, would be implemented prior to and during construction of the sites.

Mitigation: No mitigation is necessary.

IMPACT: HYDRO-7: Will the Project place structures or housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

Analysis: *Less than Significant, LPA and Alternate Castroville Passenger Station Site*

Work within the project area should result in no significant floodplain/floodway impacts. Encroachment into the floodplain would be minimized and would include only slight grading with the existing contours remaining relatively unchanged. Design of facilities would conform to the guidelines of the National Flood Insurance Program and policies established by the County Board of Supervisors, with the advice of the Monterey County Flood Control and Water Conservation District. Pre-project and post-project hydraulic models of the project sites at Castroville (Alternative 2 only) and Pajaro would be prepared during final design to evaluate the impact of the recontouring on the water surface elevation in the floodplains. Hydraulic modeling would be conducted using FEMA-approved hydraulic models and would be used to size any culverts and erosion control facilities necessary to minimize impacts to the floodplain. Energy dissipation devices would be incorporated at the outlet of any proposed culverts in order to control erosion downstream. A hydraulic report summarizing the results of the modeling would be submitted for review by the County Flood Control and Water Conservation District.

Mitigation: No mitigation is necessary.

3.7.7 CUMULATIVE IMPACTS

IMPACT: HYDRO-C1: Will the project have significant cumulative impacts to hydrology and water quality?

Analysis: *Less than Significant, LPA and Alternate Castroville Passenger Station Site*

The projects will all incorporate temporary and permanent water pollution prevention measures and BMPs that reduce discharges of pollutants of concern at each site. Each project will include development of a Storm Water Pollution Prevention Plan in compliance with the General Permit for construction sites to ensure that construction does not result in degradation of water quality. The incorporation of additional permanent BMPs into each site's drainage system should result in an improvement in water quality from the site runoff as it enters into the adjacent surface waters. With adherence to the pollution prevention measures at each site, no significant impact will occur at any one site and no significant cumulative impact to water quality will occur.

Work within the floodplain of each site should result in no significant floodplain/floodway impacts. Encroachment into the floodplain will be minimized and will include only slight grading with the existing contours remaining relatively unchanged at each site. Since the floodplains where construction will occur for the various sites are not hydraulically connected, no cumulative impact to the flood plain will occur.

Mitigation: No mitigation is necessary.

3.7.8 CONCLUSION

Implementation of the proposed project and alternative sites would not result in any significant impacts.

3.7.9 REFERENCES

California Stormwater Quality Association. 2003. *Stormwater Best Management Practice Handbooks*.

Central Coast Regional Water Quality Control Board, California. 1994. *Water Quality Control Plan for the Central Coast Region*.

Federal Emergency Management Administration. 1984. *Flood Insurance Rate Map Panel 060195-0005D*.

Federal Emergency Management Administration. 1986. *Flood Insurance Rate Map Panel 060195-0055F*.

Fugro West, Inc. 1995. *North Monterey County Hydrogeologic Study, Volume I, Water Resources*. Consultant report prepared for the Monterey County Water Resources Agency. 118p.

Monterey County. 1982. *General Plan*.

3.8 LAND USE AND PLANNING

3.8.1 INTRODUCTION AND SUMMARY OF IMPACTS

This section discusses the consistency of the project changes with existing and planned land uses and existing zoning. To provide a basis for this evaluation, the setting section provides information on regional land use patterns. General Plans of the jurisdictions within the study area, and existing and planned land uses within the vicinity of project components are disclosed together with an analysis of impacts as they relate to Goals and Policies of these General Plans.

The Land Use Section covers issues specifically related to land use planning and evaluates the consistency of project changes with General Plans and other public policy documents regarding land use issues only. It does not cover associated topics such as socio-economics and housing; geology, soils and seismicity; and conversion of agricultural land. The following items are related to the Land Use Section but are evaluated in other sections of this document:

- **Socio-economics and Housing.** Issues regarding socio-economics, population and housing, and environmental justice are addressed in Section 3.11.
- **Geology, Soils and Seismicity.** Issues regarding soils and possible liquefaction are addressed in Section 3.5.
- **Agriculture.** Issues regarding conversion of agricultural land are addressed in Section 3.9.

A summary of land use impacts and mitigation measures is presented below. Full analyses of the impacts are included in Section 3.8.6.

<i>IMPACT</i>	<i>SIGNIFICANCE BEFORE MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>SIGNIFICANCE AFTER MITIGATION</i>
LU-1 Will the Project be inconsistent with County or City zoning ordinances?	Less than significant- Alternative Castroville Site	No mitigation necessary.	Less than significant
	Potentially significant- LPA	LU-1: Amend the General Plan/LCP and Rezone Project Site	Less than significant
LU-2: Will the Project increase potential for conflict as a result of incompatible land uses?	Less than significant- Alternative Castroville Site	No mitigation necessary.	Less than significant
	Potentially significant- LPA	LU-2: Design project to be compatible with surrounding land use.	Less than significant
LU-C1: Will the Project result in cumulative impacts on land uses?	Less than significant	No mitigation necessary.	Less than significant

3.8.2 ENVIRONMENTAL SETTING

Description of Proposed Project Sites

Pajaro Passenger Station at Site #1 (Watsonville Junction)

Located at the site of Watsonville Junction, the Pajaro Passenger Station Site is on the nearly level floodplain of the Pajaro River near the unincorporated community of Pajaro just southeast of the Pajaro River and the Santa Cruz County line. The City of Watsonville is just northwest of the site and across the river. The Pajaro site is in Township 12 South, Range 2 East, Mount Diablo Meridian near USGS Benchmark 28 (USGS Watsonville East quadrangle, 1955 [revised 1993]). It is bordered by Salinas Road on the west, Lewis Road on the south, the UPRR mainline to the east and the Santa Cruz to Davenport branch line to the north in a light industrial land use area. The General Plan maps this site as light industrial. Zoning is Light Industrial-Coastal Zone (LI-CZ) (Monterey County, 2004).

Castroville Passenger Station at Site #2

The community of Castroville is located in northern Monterey County, at the northern end of the Salinas Valley. Castroville is approximately 8 miles northeast of the City of Salinas, 5 miles west of the community of Prunedale and is located at the junction of three major tourist and commuter-serving highways (Highways 1, 156 and 183). Castroville is surrounded by agricultural land and is the center of the largest artichoke-growing region in the world. The community remains predominately agricultural in its land use character and industries. Castroville has a population of approximately 6,700 residents.

The preferred Castroville Passenger Station Site is at the edge of an agricultural swale that lies just north of the State Route 156 overcrossing of the UPRR main line on the east side of the unincorporated community of Castroville. Agricultural land makes up most of the site and all the lands to the north, and is bordered on the south by the Caltrans State Route 156 transportation corridor and the stubs of Collins and Benson roads. The General Plan maps this site as “Agricultural Preservation – Coastal”. The site is designated farmland in the North County Area Plan. The site includes the following agricultural zoning designations: Coastal Agricultural Preserve (Coastal Zone), Resource Conservation (Coastal Zone), and Farmland, 40-acre minimum.

Although the site is currently agricultural, it has been identified in the Castroville Community Plan as an “Opportunity Area”. The plan designates the site as “Commuter Train Station Opportunity Area” and the EIR for the plan will evaluate the impacts of a train station at a programmatic level. The plan states

that “The proposed train station ... would serve as a focal point for surrounding proposed residential development.”

Castroville Passenger Station at Site #1

Castroville Station Site #1 is adjacent to Del Monte Avenue south of State Route 156. This area is surrounded by industrial land uses. The proposed station platform and track, which is on the east side of Del Monte Avenue, was the historical location of the Castroville Depot. The General Plan maps this site as industrial. Zoning is Light Industrial-Coastal Zone (LI-CZ) (Monterey County, 2004).

Salinas Layover Yard Facility at Site #2 and Intermodal Transportation Center

The facilities proposed at Salinas will be clustered in the vicinity of the existing Amtrak station, now known as the Salinas ITC. This area is totally urbanized within the limits of the City of Salinas. The General Plan maps this site as General Commercial/Light Industrial. Zoning is Commercial District/Industrial Business Park or Industrial General District (C-District/IBP or IG District) (Salinas Municipal Code, 2002).

3.8.3 REGULATORY SETTING

The purpose of this section is to evaluate the proposed project for land use consistency with relevant adopted plans and policies. These include policies and plans of the California Coastal Commission, the County of Monterey, and the City of Salinas.

California Coastal Commission

The California Coastal Commission was established by voter initiative in 1972 (Proposition 20) and was made permanent by the Legislature through adoption of the California Coastal Act of 1976. The Coastal Commission, in partnership with coastal cities and counties, plans and regulates the use of land and water in the Coastal Zone. Development activities, which are broadly defined by the Coastal Act to include (among others) construction of buildings, divisions of land and activities that change the intensity of use of land or public access to coastal waters, generally require a coastal permit from either the Coastal Commission or the local government. The policies of the Coastal Act constitute the statutory standards applied to planning and regulatory decisions made by the Commission and by local governments, pursuant to the Coastal Act. Implementation of Coastal Act policies is accomplished primarily through the preparation of Local Coastal Programs (LCP) that are required to be completed by every county and city located within the Coastal Zone. Completed LCPs must be submitted to the Commission for review and approval. An LCP includes a land use plan that prescribes land use classifications, types and densities of allowable development, goals and policies concerning development and zoning ordinances necessary to implement the plan. Amendments to certified land use plans and LCPs only become effective after approval by the Commission.

The Castroville Site #2 is located within the Coastal Zone. Therefore, development within this area must be consistent with policies of the Coastal Act. Table 3.8-1 below, analyzes the consistency of the proposed project at Castroville Site #2 with relevant policies of the Coastal Act. Refer to Section 3.9 Agricultural Resources for additional analysis of Coastal Act agricultural policies as they relate to this site.

Table 3.8-1

**California Coastal Act Consistency Analysis
Castroville Site #2**

Policy No.	Policy	Consistency Discussion
30240 (a)	Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.	<u>Consistent</u> . Sensitive habitat areas within the Coastal Zone exist along the Castroville Slough, in the Commuter Train Station Opportunity Area. This area will receive a land use designation of Resource Conservation, which allows only low intensity uses and supporting facilities. Proposed restoration and enhancement of the Castroville Slough includes a revegetated riparian zone, which will provide a high quality wildlife habitat corridor connection to the Moro Cojo Slough, and a three-acre passive recreation park with pedestrian and bike trails. A potential vernal pool habitat in the Train Station area will require further investigation by a qualified biologist and possible mitigation measures, if wetlands are discovered.
30240 (b)	Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.	<u>Consistent</u> . Proposed station development bordering the wetlands area would be designed to be sensitive to views from the natural area into the station site. Site planning would be designed to limit the visual impact of structures and landscaping will be required to reflect the natural character of the surrounding natural area, with incorporation of native planting materials. Pedestrian and bicycle access to the adjacent neighborhoods will be included in the conservation design for the Castroville Slough.
30244	Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.	<u>Consistent</u> . Mitigation measures included in the EIR require preparation of an archaeological survey as a condition of General Development Plan approval and, if necessary, identification of appropriate mitigation in accordance with guidelines of the State Office of Historic Preservation and the Native American Heritage Commission.

Policy No.	Policy	Consistency Discussion
30250 (a)	<p>New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.</p>	<p><u>Consistent</u>. Proposed station development at the Castroville Site #2 would be located between Castroville and an existing residential neighborhood to the east (Monte del Lago) and is designed to serve residents and area commuters in Castroville.</p>
30251	<p>The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.</p>	<p><u>Consistent</u>. The proposed project includes requirements for Design Guidelines and Development Standards to ensure that the scale and design of the station enhances the existing small town character and incorporates themes that reflect the community’s agricultural and cultural history. In addition, because the site borders existing farmland, the station will be separated by a landscaped agricultural conservation buffer. Pedestrian and bicycle trails are also included as part of the proposed project..</p>

Policy No.	Policy	Consistency Discussion
30252	<p>The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing non-automobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.</p>	<p><u>Consistent</u>. The proposed project provides enhanced public access to coastal areas in the vicinity of Castroville via the new train station, which would allow visitors the opportunity to use rail transportation instead of driving. Limited new commercial development would be located in residential neighborhoods and near the train station. Bicycle and pedestrian paths would connect new residential development to existing and proposed parks, neighborhood greens and the restored sloughs. The train station includes 224 parking spaces with space for an additional 160 “reserved” for future use. The County of Monterey would also coordinate with Monterey-Salinas Transit to establish public transportation services to the train station.</p>
30253	<p>New development shall: (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard. (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. (3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development. (4) Minimize energy consumption and vehicle miles traveled. (5) Where appropriate, protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses.</p>	<p><u>Consistent</u>. The proposed station would be required to provide preliminary seismic and geologic hazard reports to address the potential hazards. All final engineering and improvement plans will be prepared in accordance with Monterey County standards and submitted to the County for review and approval prior to issuance of building permits. Flood hazards associated with the Castroville Sloughs will be mitigated through restoration efforts, which will increase the conveyance capacity. Bicycle/pedestrian trails and new rail transit opportunities would reduce vehicle miles traveled and minimize energy consumption.</p>

Monterey County General Plan

The General Plan is a 20-year planning document guiding the growth and development of the unincorporated portions of Monterey County, which includes project sites for Pajaro and Castroville. Castroville is located in the North County Planning Area of the 1982 General Plan.

Adopted by the Board of Supervisors in 1982, the Monterey County General Plan contains several Goals and Policies in the Environmental Constraints Chapter (Chapter III) and County Development Chapter (Chapter IV) that apply to the present proposed project. The Goals, Policies, Actions, and Programs having to do with Natural Resources, Seismic Hazards, Flood Hazards, Air Quality, Water Quality, Demography, Land Use, and Transportation are pertinent to the project and are discussed in applicable sections of this document (Monterey County, 1982).

The County of Monterey is currently updating its General Plan (Monterey County, 2004). The Draft is available for public review, but has not been adopted. Therefore, only the 1982 General Plan has been incorporated by reference for analysis of the proposed project.

Monterey County Local Coastal Program / North County Coastal Land Use Plan

The State Coastal Act (1977) requires each coastal jurisdiction to prepare a local coastal program consisting of a land use plan and implementation program. The prime objective of the Monterey County Local Coastal Program (LCP) is to plan for appropriate levels of land use and development in the Coastal Zone while protecting coastal resources and providing or maintaining coastal access and recreation opportunities. A second objective is to maintain the rural character of North County with its predominant agricultural, low density residential and open space uses while clustering medium and high density residential development in areas where water, sewer and transportation services are available. Land uses are designated on the land use map according to an evaluation of existing uses, appropriate levels of use to protect coastal resources and levels of development that can be accommodated by public works systems, such as wastewater collection and treatment and roadways.

The *North County Coastal Land Use Plan* (NCLUP) serves as the local coastal program document for the North Monterey County area and includes land within the immediate vicinity of Castroville, including the Castroville Site #2, which is located in the Coastal Zone and therefore is subject to the NCLUP. Prior to development at this site, individual LCP amendments must be approved by the County and certified by the California Coastal Commission.

Castroville Community Plan

Monterey County Redevelopment Agency is in the process of preparing a community plan for Castroville. The plan is designed to guide growth and development in the community, and would require amendment of the Monterey County General Plan to redesignate the area covered by the Community Plan as a Community Plan area. A Notice of Preparation for an Environmental Impact Report evaluating the proposed plan was issued on June 6, 2005. The Castroville Community Plan has not been adopted by the County of Monterey. When the review process is complete, the Castroville Community Plan will be adopted into the General Plan as an Amendment and is intended to implement the General Plan's vision, goals, policies, strategies and land use plan.

The Castroville Community Plan falls within the boundaries of the *North County Area Plan* (NCAP), which was adopted as an amendment to the *Monterey County General Plan* in 1985. The NCAP is consistent with the intent and philosophy of the countywide General Plan and is intended to provide refinement in order to reflect neighborhood concerns which are not addressed at the countywide level. The land use maps contained in the NCAP and the NCLUP designate the type, location and intensity of all future land uses in North County. All of the goals, objectives and policies of the General Plan apply to the NCAP and are supplemented by additional policies in the NCAP. The land use plan and map supersedes the countywide land use plan; however, it does not supersede the certified NCLUP for the area within the Coastal Zone. Changes to the NCAP must be consistent with the intent and overall direction of the countywide plan.

Monterey County Zoning Ordinance

The Zoning Ordinance is the primary implementation tool for the Land Use Element of the *Monterey County General Plan*. Land uses within the Castroville Site #2 will be subject to requirements of the Coastal Zoning Ordinance (Title 20). The Zoning Ordinance implements the goals and policies of the General Plan by identifying specific types of land uses, intensity of uses and development standards to be used in guiding the development and use of land within unincorporated areas of the County. Implementation of the proposed LPA with its new land uses and regulations will require adoption into the Zoning Ordinances.

Salinas General Plan

The City's 2002 General Plan Update was considered by the Salinas Planning Commission and adopted by the Salinas City Council in late 2002. The Salinas General Plan applies to the Salinas Layover Yard Facility and Intermodal Transportation Center.

1982 General Plan Policies

Table 3.8-2 identifies goals, objectives, and policies that provide guidance future land use patterns. The table also indicates which land use evaluation criteria are responsive to each set of policies.

Table 3.8-2

General Plan Goals, Objectives, and Policies
Land Use and Planning

Plan Document	Document Section	Document Reference	Policies	Relevant Evaluation Criteria
Monterey County General Plan 1982	Chapter IV Area Development	Goal 26: Promote appropriate and orderly growth and development while protecting desirable existing land uses.	Policy 26.1.4: The County shall designate growth areas only where there is a provision for an adequate level of services and facilities such as water, sewage, fire and police protection, transportation and schools. Policy 26.1.5: The County shall designate future land uses in a manner which will achieve compatibility with adjacent land uses.	2 1, 2
North County Land Use Plan & Local Coastal Program (1982)	Land Use and Development	4.3.5, General Policies	Policy 1. Rural character. Policy 5. Development of non-coastal dependent commercial facilities. Policy 8. Development and the land use map. Policy 9. Local Coastal Program conformance.	1, 2 2 1, 2 1, 2
Salinas General Plan (2002)	Land Use Element	Goal LU-2 Management of Future Growth	Policy LU-2.5 Urban services and facilities.	1, 2
Salinas General Plan (2002)	Land Use Element	Goal LU-3 Economic Development	Policy LU-3.7 Central city revitalization.	1, 2

Source: County of Monterey; City of Salinas

3.8.4 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The following significance criteria were used to evaluate land use and planning impacts associated with the proposed Project (Table 3.8-3).

Table 3.8-3

Evaluation Criteria with Point of Significance
Land Use and Planning

Evaluation Criteria	As Measured by	Point of Significance	Justification
1. Will the Project be inconsistent with zoning?	Acres of land	Greater than 0 acres of land	Pajaro and Castroville: CEQA, Monterey County General Plan Salinas: Salinas General Plan
2. Will the Project increase potential for conflict as a result of incompatible land uses?	Lineal feet of incompatible uses	Greater than 0 lineal feet	Pajaro and Castroville: CEQA, Monterey County General Plan Salinas: Salinas General Plan

Source: Monterey County General Plan (1982), Salinas General Plan (1982).

3.8.5 METHODOLOGY

The adopted General Plan land use maps were used to determine planned land uses as the basis for evaluation of impacts. Existing land uses were determined from aerial photographs, supplemented by field observations in areas adjacent to project changes.

3.8.6 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION MEASURES

Impact: LU-1 Will the Project be inconsistent with County or city zoning ordinances?

Analysis: *Less than Significant*; Alternate Castroville Site

The Pajaro Station site, Castroville Station Site #1, and Salinas Station site are zoned industrial, and the project would be consistent with this zoning designation.

Mitigation: None required; Alternate Castroville Site

Analysis: *Potentially Significant; LPA*

The property at Castroville Station Site #2 is designated as Agricultural-Preservation (40 acre minimum) in the 1982 General Plan and is zoned agricultural. The project is inconsistent with the existing General Plan designation and zoning.

Castroville Site #2 falls within the boundaries of the Coastal Zone and is subject to policies of the Monterey County Local Coastal Program (LCP) and North County Coastal Land Use Plan (NCLUP). Any changes to land use within the Coastal Zone would be considered an amendment to the County's LCP for purposes of the Coastal Act. Therefore, prior to development at this site, individual LCP amendments must be approved by the County and they must be consistent with the Coastal Act, as determined by the Coastal Commission.

Proposed development of the Castroville Site #2 as a commuter passenger station would be contiguous to existing residential neighborhoods in Castroville and represent a continuation of the established urban pattern. The proposed project expands upon an existing residential area located on the northeastern edge of Castroville. The passenger station at Site #2 would be located between Castroville and existing residential areas to the east, the Monte del Lago mobile home community and the Moro Cojo subdivision, which also borders the North Monterey County High School and the proposed middle school. Development of the passenger rail station thus represents a logical continuation of the existing land use pattern. In addition, the project includes the continuation of pedestrian and bike trails from the site to existing trails and routes.

In conclusion, the proposed project at Castroville Site #2 is largely consistent with policies of the Coastal Act and NCLUP.

Mitigation: **LU-1: Amend the General Plan and Rezone the Site.**

The General Plan shall be amended to incorporate Castroville Station Site #2 as a compatible land use, and shall be rezoned to light industrial. Prior to development on this site, individual LCP amendments must be approved by the County and certified by the California Coastal Commission.

After

Mitigation *Less than Significant; LPA*

In conclusion, the proposed project is largely consistent with policies of the Monterey County General Plan, City of Salinas General Plan, local zoning ordinances, and with Castroville Site #2, the Coastal Act and NCLUP. Implementation of this mitigation measure would reduce the impact to a less than significant level.

Impact: LU-2: Will the Project increase potential for conflict as a result of incompatible land uses?

Analysis: *Less than Significant*; Alternate Castroville Site

Transit activities at the Pajaro site, Castroville Site No. 1, and Salinas site would be compatible with surrounding industrial uses.

Mitigation: None required; Alternate Castroville Site

Analysis: *Potentially Significant*; LPA

The train station at Castroville Site # 2 could be incompatible with surrounding agricultural uses. Agricultural buffers and a green belt would be necessary to buffer the high human-use areas from agricultural activities.

Mitigation: **LU-2: Design project to be compatible with surrounding land use.**

The applicant shall design and install a landscaped buffer between the Castroville Site #2 Passenger Rail Station facility, parking area, and access roads, consistent with the recommendations in the Land Use Plan of the LCP. Both the Coastal and Inland Zoning Ordinances (Sections 20.144.080 and 21.66.030, respectively) require that new development adjacent to agricultural areas establish buffer zones under easement, required as a condition of project approval. The easement is required to be 200 feet wide or wider where necessary to mitigate adverse impacts between agricultural and adjacent land uses.

After
Mitigation *Less than Significant*; LPA

Implementation of this mitigation measure would reduce the impact to a less than significant level.

3.8.7 CUMULATIVE IMPACTS

Impact: LU-C1: Will the Project result in cumulative impacts on land uses?

There is an inter-relationship between land development and transportation infrastructure. Transportation services, such as bus and rail transit as well as roadways, must be available to provide residents and businesses access and mobility as land is being developed.

The project would be consistent with County and City general plan designations and zoning. The Castroville Site No. 2 would convert 9 acres of in-production agricultural land to industrial and would require a general plan amendment and a zoning change. Site No. 2 is consistent with the

draft Castroville Community Plan. The project would not require the extension of existing infrastructure (roads, sewer, and water) or construction of new infrastructure to adequately serve the site.

3.8.8 CONCLUSION

With implementation of the above-referenced mitigation measures, impacts resulting from the proposed project and alternative sites to land use and planning would be reduced to less than significant.

3.8.9 REFERENCES

California Coastal Act of 1976, 2005. Public Resources Code, Division 20.

City of Salinas, 2002. *Salinas General Plan*, September.

City of Salinas, 2002. *Salinas Municipal Code*.

Monterey County, 1982a. *Monterey County General Plan*, adopted by the Board of Supervisors, September 30.

Monterey County, 1982b. *North County Land Use Plan (Local Coastal Program)*, certified June.

Monterey County, 1985. *North County Area Plan*.

Monterey County, 1988. *Monterey County Coastal Implementation Plan Part 2, Regulations for Development in the North County Land Use Plan Area*, adopted January 5.

3.9 AGRICULTURE

3.9.1 INTRODUCTION AND SUMMARY OF IMPACTS

This section addresses the Project’s potential to result in loss of agricultural land. It evaluates the agricultural status of each project site, and evaluates the potential of the project to contribute to loss of agricultural land. Land Use issues, such as the relationship of the project sites to the Local Coastal Zone and Local Coastal Program, are discussed in the Section 3.8, Land Use.

A summary of agricultural resources impacts and mitigation measures is presented below. Full analyses of the impacts is included in Section 3.9.6.

<i>IMPACT</i>	<i>SIGNIFICANCE BEFORE MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>SIGNIFICANCE AFTER MITIGATION</i>
AG-1: Will the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use?	No impact – Alternate Castroville Site Less than significant-LPA	No mitigation necessary. AG-1: Purchase of development rights, conservation easements or transfer of development rights.	No impact Less than significant
AG-2: Will the Project conflict with existing zoning for agricultural use or a Williamson Act?	No impact – Alternate Castroville Site Significant-LPA	No mitigation necessary. AG-2: Rezoning of Castroville Passenger Station Site.	No impact Less than significant
AG-3: Will 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?	Less than significant	No mitigation necessary.	Less than significant
AG-C1: Will the project have the potential to have a cumulative impact on agriculture?	Less than significant	No mitigation necessary.	Less than significant

3.9.2 ENVIRONMENTAL SETTING

The project is located in an area in which growing communities are located in the midst of an agricultural region. Agriculture is a vital part of the local economy, as it is the largest industry in Monterey County. Agricultural land in Monterey County is monitored by the California NRCS Farmland Mapping and Monitoring Program, which produces maps and statistical data used for analyzing impacts on California's agricultural resources. The agricultural lands in California are categorized by soil quality and irrigation status, and then depicted on a map by symbol. The agricultural categories are:

- Prime Farmland. This category of land has the best combination of physical and chemical characteristics for the long term production of crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops. Prime Farmland must have been used for irrigated agricultural production some time during the four years prior to the mapping date. Maps are updated every two years.
- Farmland of Statewide Importance. Although similar to Prime Farmland, this category of land has minor shortcomings, such as greater slopes or less ability to hold and store moisture. This land must have been used for the production of irrigated crops at some time during the four years prior to the mapping date.
- Unique Farmland. This land has lesser quality soils and is used for the production of specific high economic value crops at some time during the four years prior to the mapping date. Examples of crops on unique farmland include oranges, olives, avocados, rice, grapes, and cut flowers.
- Farmland of Local Importance. This land is of importance to the local agricultural economy, determined by each county's board of supervisors and local advisory committees. Examples could include dairies, dryland farming.

Throughout this section these categories of farmlands: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance, are referred to collectively as status farmlands. The lands that comprise status farmlands do not include grazing land, which is a separate classification.

According to the Monterey County Agricultural Commission (County of Monterey, 2006), the acreage of agricultural land is remaining stable. In 2000 there were a total of 1,299,965 acres of agricultural land in Monterey County, with 239,335 acres dedicated to farmland and 1,081,054 in grazing use. The market value of crops in Monterey County totaled almost \$3.4 billion in 2004 (see Table 3.9-1), with the top crops being lettuce, strawberries, broccoli and grapes.

However, the County has steadily been losing existing Prime Farmland to urban development and other non-agricultural uses, there has been other lands converted to agricultural use. From 1984 to 2000 8,853 acres of Prime Farmland were lost, but 6,766 acres were gained for grape growing (wine production) in that same period.

Table 3.9-1

Monterey County Agricultural Summary

Crop	Cash Value - 2004
Fruits and Nuts	\$529,292,718
Vegetables	\$2,530,112,000
Field Crops	\$15,515,000
Nursery Crops	\$271,209,000
Seed Crops	\$7,022,000
Livestock, Poultry and Dairy	\$39,110,800
Apiary	47,800
Total Value	\$3,392,309,318

Source: Monterey County 2005.

Description of Proposed Project Sites

Pajaro Passenger Station at Site #1 (Watsonville Junction)

The proposed Pajaro Passenger Station Site #1 has been a railroad yard for many years. The site is in an area of light industrial land use, and there is no agricultural land on the site.

Castroville Passenger Station at Site #2

The LPA is the Castroville Passenger Station Site #2 located at the edge of an agricultural swale that lies just north of the State Route 156 overcrossing of the UPRR main line on the east side of the unincorporated community of Castroville. The site is at an elevation of 18 feet. Agricultural land makes up most of the site and all the lands to the north, east and west, and is bordered on the south by the Caltrans State Route 156 transportation corridor and the stubs of Collins and Benson roads. The project would include a minimum of 50 foot wide buffers between the station site and right-of- ways and the surrounding agricultural lands.

Site soils have been mapped by the NRCS as belonging to the Cropley and Santa Ynez series. The specific soil types include the Cropley silty clay, 2 to 9 percent slopes and Santa Ynez fine, sandy loam, 2 to 9 percent slopes (NRCS 1978). The site is currently used for production of artichokes.

The General Plan maps this site as “Agricultural Preservation – Coastal”. The site is designated farmland in the North County Area Plan. However, the Natural Resources Conservation Service (NRCS) has not rated the parcel as prime farmland or unique farmland (NRCS 2005). The NRCS has rated the site as

statewide or locally important farmland. The site is not under Williamson Act contract, but does include the following agricultural zoning designations: Coastal Agricultural Preserve (Coastal Zone), Resource Conservation (Coastal Zone), and Farmland, 40-acre minimum.

Castroville Passenger Station at Site #1

Castroville Passenger Station Site #1 would be adjacent to Del Monte Avenue south of State Route 156. This area is surrounded by industrial land uses. The station platform site, which is on the east side of Del Monte Avenue, was the historical location of the Castroville Depot. The area adjacent to the station on the west side of Del Monte Avenue, which would be used to provide parking at the site, is currently used for agricultural processing support operations. Agricultural businesses that would be directly affected by the parking area include Ag Services, Inc.; Associated Produce Distributors; Sweet Darling Strawberries, and Vegetable Grower's Supply. There is no agricultural land at the site.

Salinas Layover Yard Facility at Site #2 and Intermodal Transportation Center

The proposed Salinas Intermodal Transportation Center and Layover Yard Facility at Site #2 would be located west of the intersection of Main and Market Streets, on land occupied by the current Salinas Amtrak station and on nearby commercial properties southeast and southwest of the station. The site is zoned for light industrial and mixed use office/commercial. There is no agricultural land on the site.

3.9.3 REGULATORY SETTING

Farmland Protection Policy Act

The Farmland Protection Policy Act (FPPA) (7 CFR 658.1-7) is intended to minimize the impact Federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It assures that, to the extent possible, Federal programs are administered to be compatible with state, local units of government, and private programs and policies to protect farmland. For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a Federal agency or with assistance from a Federal agency.

The FPPA is administered by the NRCS. NRCS uses a land evaluation and site assessment system to establish a farmland conversion impact rating score on proposed sites of federally funded and assisted projects. This score is used as an indicator for the project sponsor to consider alternative sites if the potential adverse impacts on the farmland exceed the recommended allowable level. The assessment is completed on form AD-1006, Farmland Conversion Impact Rating. Projects that receive a rating of

160 or higher are considered to have a substantial impact on farmland and are encouraged to evaluate alternative sites.

California Coastal Act Policies

Agriculture is a traditional coastal activity that has contributed substantially to the region's economy, pattern of employment, quality of life, open space, and scenic quality. The Coastal Act requires that the maximum amount of prime agricultural land shall be maintained in production to assure the protection of the area's economy. Agriculture shall be protected by establishing stable boundaries separating urban and rural areas, by locating new development contiguous to existing developed area, and by minimizing conversions or divisions of productive agricultural land.

Key Policy

The County shall support the permanent preservation of prime agricultural soils exclusively for agricultural use. The County shall also protect productive farmland not on prime soils if it meets State productivity criteria and does not contribute to degradation of water quality. Development adjacent to prime and productive farmland shall be planned to be compatible with agriculture.

Relevant Specific Policies

5. Conversion of Agricultural Conservation lands to non- agricultural uses shall be allowed only if such conversion is necessary to:
 - a) establish a stable boundary between agriculture and adjacent urban uses or sensitive habitats; or
 - b) accommodate agriculture-related or other permitted uses which would economically enable continuation of farming on the parcel and adjacent lands.
6. For new development adjacent to agricultural areas, well- defined buffer zones shall be established within the area to be developed to protect agriculture from impacts of new residential or other incompatible development and mitigate against the effects of agricultural operations on the proposed uses. Subdivisions, rezoning, and use permit application for land adjacent to areas designated on the plan map for Agricultural Preservation or Agricultural Conservation shall be conditioned to require dedication of a 200 foot wide open space easement, or such wider easement as may be necessary, to avoid conflicts between the proposed use and the adjacent agricultural lands. For development adjacent to agricultural areas not designated for exclusive agricultural use, a reduced easement of not less than 50 feet shall be required. These easements shall extend the full length of the boundaries between the property to be developed and adjacent agricultural lands. Permanent roads may serve as part of this easement. Land within the easement shall be maintained in open space. Minor storage buildings or sheds associated with the residential uses, may be permitted as a conditioned use. The open space easement shall not be used for recreational areas as part of housing projects or public facilities.

Monterey County General Plan and Williamson Act Program

The Monterey County General Plan designates several categories of agricultural land in the Land Use Element, and also contains an Agriculture Element which establishes goals, objectives, and policies regarding agriculture. The County also administers the Williamson Act Program. Williamson Act contract lands are defined in the California Land Conservation Act of 1965. The law was enacted to protect agriculture and open space land and to adjust imbalanced tax practices. Williamson Act contracts, also known as agricultural preserves, offer tax incentives for agricultural land preservation by ensuring that land will be assessed for its agricultural productivity rather than its highest and best uses. None of the project sites are under Williamson Act Contract.

Table 3.9-2 identifies goals, objectives, and policies that provide guidance for preservation of agricultural lands in the Project area. The table also indicates which evaluation criteria are responsive to each set of policies. The Monterey County General Plan written in 1982 is currently being updated but it has not yet been ratified by the Planning Commission and Board of Supervisors. Therefore, the 1982 Monterey County General Plan Goals, Policies, and Objectives were used for disclosure.

Table 3.9-2

General Plan Goals, Objectives, and Policies
Agriculture

Plan Document	Document Section	Document Reference	Policies	Relevant Evaluation Criteria
Monterey County 1982 General Plan	Chapter IV, Area Development, Goals, Objectives and Policies for Land Use	Goal 30 Policy 30.0.1	Prevent non-agricultural uses which could interfere with the potential of normal agricultural operations on viable farmlands designated as prime, of statewide importance, unique, or of local importance.	1
Monterey County 1982 General Plan	Chapter IV, Area Development, Goals, Objectives and Policies for Land Use	Goal 30 Policy 30.0.3	Allow division of viable farmland designated as prime, of statewide importance, unique, or of local importance only for exclusive agricultural purposes, when demonstrated not to be detrimental to the agricultural viability of adjoining parcels.	1

Table 3.9-2

General Plan Goals, Objectives, and Policies
 Agriculture

Plan Document	Document Section	Document Reference	Policies	Relevant Evaluation Criteria
Monterey County 1982 General Plan	Chapter IV, Area Development, Goals, Objectives and Policies for Land Use	Goal 30 Policy 30.0.4	Preserve, enhance, and expand viable agricultural land uses on farmland designated as prime, of statewide importance, unique, or of local importance through application of "agricultural" land use designations and encouragement of large lot agricultural zoning.	2
Monterey County 1982 General Plan	Chapter IV, Area Development, Goals, Objectives and Policies for Land Use	Goal 30 Policy 30.0.5	Support policies that provide tax and economic incentives which will enhance competitive capabilities of farms and ranches, including the use of Williamson Act contracts.	2

Source: Monterey County, 1982.

3.9.4 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The following significance criteria were used to evaluate the agricultural impacts associated with the proposed Project (Table 3.9-3).

Table 3.9-3

Evaluation Criteria with Point of Significance
Agriculture

Evaluation Criteria	As Measured by	Point of Significance	Justification
1. Will the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use?	Loss land considered important for protection by National Resources Conservation Service (NRCS)	Score \geq 160 on AD-1006 Farmland Conversion Impact Rating Form	Farmland Protection Policy Act (7 CFR 658.1-7) CEQA guidelines; Monterey County General Plan, Agriculture Element.
2. Will the Project conflict with existing zoning for agricultural use or a Williamson Act?	Conflicts with zoning or conversion of lands under Williamson Act.	Greater than 0 acres	CEQA guidelines; Monterey County General Plan, Agriculture Element.
3. Will 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?	Activities that could promote future conversion of agricultural land	Greater than 0 acres	CEQA guidelines; Monterey County General Plan, Agriculture Element.

Source: Parsons 2005.

3.9.5 METHODOLOGY

The impact analysis is based on a review of relevant literature and technical reports concerning the project area. Prime Farmland was identified based on the classification of the NRCS. Williamson Act contract status was based on information provided by Monterey County. In compliance with the FPPA, a Farmland Conversion Impact Rating Form was completed by the NRCS.

3.9.6 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION MEASURES

IMPACT: AG-1: Will the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use?

Analysis: *No Impact, Alternate Castroville Passenger Station Site*

No agricultural lands are present at any of the sites that are included in this alternative.

Mitigation: No mitigation is necessary.

Analysis: *Less than Significant, LPA*

There are no agricultural lands at the Pajaro Passenger Station or Salinas Passenger Station sites. However, Passenger Station Site #2, the preferred site in Castroville, is located on Prime Farmland and construction of the station would result in the loss of approximately 9 acres of Prime Farmland. This constitutes 0.00069 percent of the total farmland in the County. The significance of this loss of farmland was evaluated using the U.S. Department of Agriculture's Farmland Conversion Impact Rating system (Form AD-1006), with input from the NRCS, who assessed the relative value of the farmland to be converted. The total site assessment score was 117, which is less than the threshold value of 160. Regulation 7 CFR 658.4 provides that "sites receiving a total score of less than 160 points be given a minimal level of consideration for protection and no additional sites need to be evaluated". Form AD-1006 is attached in Appendix D. Despite the fact that this impact is considered less than significant from a federal regulatory perspective, local policies recommend mitigation for loss of agricultural land.

Mitigation: **AG-1: Purchase of development rights, conservation easements or transfer of development rights.**

The Transportation Agency for Monterey County shall compensate for the loss of prime agricultural land at Castroville Passenger Station Site #2 by purchasing development rights or conservation easements for agricultural land elsewhere, or by obtaining a transfer of development rights from a landowner of agricultural land elsewhere in the County prior to any development of the site.

After

Mitigation: *Less than Significant*

Mitigation would compensate for the loss of agricultural land by preserving land elsewhere.

IMPACT: AG-2: Will the Project conflict with existing zoning for agricultural use or a Williamson Act?

Analysis: *No Impact, Alternate Castroville Passenger Station Site*

Neither the Pajaro Passenger Station Site #1, Castroville Passenger Station Site #1, nor the Salinas Station sites are under Williamson Act Contracts, nor are they zoned for agricultural use.

Mitigation: No mitigation is necessary.

Analysis: *Significant, LPA*
Although Castroville Passenger Station Site #2 is not under Williamson Act contract, it is zoned for agricultural use.

Mitigation: **AG-2: Rezoning of Castroville Passenger Station Site #2.**
TAMC shall request a revision to the existing zoning at Castroville Passenger Station Site #2 from Monterey County to be consistent with the proposed land use.

After
Mitigation: *Less than Significant*
Rezoning would eliminate the conflict in zoning for Castroville Station Site #2.

IMPACT: AG-3: Will 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?

Analysis: *Less than Significant, LPA and Alternate Castroville Passenger Station Site*

The proposed Pajaro Passenger Station Site #1 and Salinas station site areas are both in urban areas and would not be expected to result in conversion of farmland.

Although Castroville Passenger Station Site #1 is located in an industrial area, the industries surrounding the project site are all associated with agricultural production and provide important services to the local agricultural community. Loss of local industries that serve the agricultural community has the potential to affect the viability of existing agricultural operations. Because it is speculative to determine whether the loss of local industries would result in conversion of farmland to non-agricultural uses, this impact has not been found to be significant. However, the importance of these local industries to agriculture is considered a factor in site selection.

Because Castroville Passenger Station Site #2 is directly adjacent to the developed areas of Castroville, it is not expected that development of the project site would result in conversion of adjacent agricultural lands to non-agricultural use. It is expected that existing land use controls would encourage the continued use of adjacent areas for agriculture. A draft *Castroville Community Plan (2005)* does however envision the redevelopment of agricultural lands surrounding Castroville, including a commuter train subarea.

Mitigation: No mitigation is necessary.

3.9.7 CUMULATIVE IMPACTS

IMPACT: AG-C1: Will the project have the potential to have a cumulative impact on agriculture?

Analysis: Less than Significant

Although the project would contribute to the cumulative loss of farmland in Monterey County, none of the project sites is considered Prime or Unique Farmland. The Pajaro Station and Salinas Station sites are not in agricultural areas. Although the Castroville Passenger Station Site #2 is on agricultural land, the site is immediately adjacent to urbanized Castroville, and has already been considered for redevelopment in the draft *Castroville Community Plan*. Mitigation is proposed to compensate for the project's impacts, and the cumulative loss of farmland is considered to be a less than significant impact.

3.9.8 CONCLUSION

With implementation of the above-referenced mitigation measures, impacts to agricultural resources resulting from the proposed project and alternatives would be reduced to less than significant.

3.9.9 REFERENCES

California, State Department of Conservation, Farmland and Open Space Resource Agency, *Farmland Mapping and Monitoring Program*.

Monterey County. 1982a. *Monterey County General Plan*, adopted by the Board of Supervisors, September 30.

Monterey County. 1982b. *North County Land Use Plan (Local Coastal Program)*, certified June 1982

Monterey County 2005. *Monterey County 2004 Crop Report*, available on website at http://www.co.monterey.ca.us/ag/2004_cropreport.htm

Monterey County, 2006. Personal communication with Bob Roach, County Agricultural Commission. March 21.

Natural Resources Conservation Service (NRCS).1978. *Soil Survey of Monterey County*. April.

Natural Resources Conservation Service (NRCS). 2005. *Farmland Conversion Impact Rating for Caltrain Extension to Monterey County*.

3.10 NOISE

3.10.1 INTRODUCTION AND SUMMARY OF IMPACTS

This section assesses the existing ambient noise environment along the project corridor, identifies sensitive receptors, and evaluates the potential noise impacts that would be generated by the project. Potential mitigation measures that can be implemented are also identified and discussed in this section.

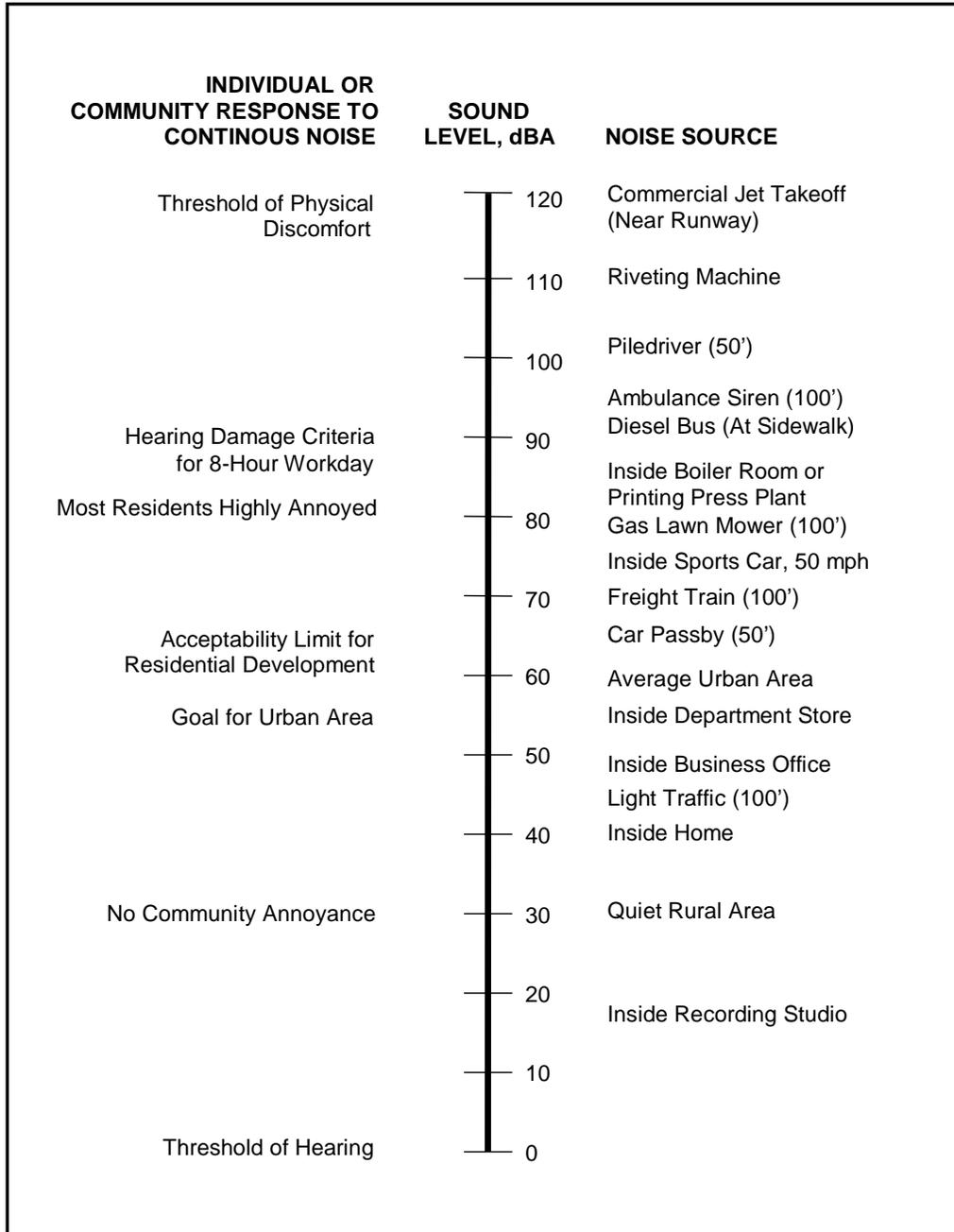
Noise is usually defined as sound that is undesirable because it interferes with speech communication and hearing, or is otherwise annoying. Under certain conditions, noise may cause hearing loss, interfere with human activities, and in various ways may affect people's health and well being.

The decibel (dB) is the accepted standard unit for measuring the amplitude of sound because it accounts for the large variations in sound pressure amplitude. When describing sound and its effect on a human population, A-weighted (dBA) sound pressure levels are typically used to account for the response of the human ear. The term "A-weighted" refers to a filtering of the noise signal in a manner corresponding to the way the human ear perceives sound. The A-weighted noise level has been found to correlate well with people's judgments of the noisiness of different sounds and has been used for many years as a measure of community noise. Figure 3.10-1 illustrates typical A-weighted sound pressure levels for various noise sources.

Another descriptor, the day-night average sound pressure level (L_{dn}), was developed to evaluate the total daily community noise environment. The L_{dn} is a 24-hour average sound pressure level with a 10-dB time-of-day weighting added to sound pressure levels in the nine nighttime hours from 10:00 PM to 7:00 AM. This nighttime 10-dB adjustment is an effort to account for the increased sensitivity to nighttime noise events. FTA uses L_{dn} and equivalent sound level (L_{eq}) to evaluate train noise impacts at the surrounding communities.

Figure 3.10-1

Typical A-Weighted Sound Levels



Source: Parsons, 2005

A summary of noise impacts and mitigation measures is presented below. Full analyses of the impacts are included in Section 3.10.6.

<i>IMPACT</i>	<i>SIGNIFICANCE BEFORE MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>SIGNIFICANCE AFTER MITIGATION</i>
NO-1: Would the Project expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of lead or responsible agencies?	Significant	NO-1: Utilize special horn designs or establish quiet zones.	Less than significant
NO-2: Would the Project expose persons to or generate excessive groundborne vibration or groundborne noise levels?	No impact	No mitigation necessary.	No impact.
NO-3: Would the Project cause a substantial permanent increase in ambient noise levels in the project vicinity?	Less than significant	NO-1: Utilize special horn designs or establish quiet zones.	Less than significant
NO-4: Would the Project cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity?	Significant	NO-4: Implement Best Management Practices during construction of the project.	Less than significant
NO-5: 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 expose people residing or working in the project area to excessive noise levels?	No impact	No mitigation necessary.	No impact
NO-6: For a project within the vicinity of a private airstrip, would the Project expose people residing or working in the project area to excessive noise levels?	No impact	No mitigation necessary.	No impact
NO-1c: Will the Project have the potential to generate cumulative noise impacts in excess of standards or cause a substantial increase in noise levels above existing levels in the project vicinity?	Potentially significant	Regionally, noise impacts from increased service on the rail lines could be minimized by implementation of additional noise abatement methods such as construction of soundwalls and limited use of train horns, as described above in Mitigation Measure NO-1.	Less than significant.

3.10.2 ENVIRONMENTAL SETTING

Identification of Sensitive Receptors

Reconnaissance of the area along the project corridor between Gilroy and Salinas was conducted by Parsons personnel in September 2005 to identify noise sensitive receptors located within approximately 400 feet of the centerline of the existing freight train Coast Line. The Coast Line was selected because the proposed Caltrain commuter rail extension will also run along these tracks. Noise sensitive receptors that could occur within the project area include residences, hotels, motels, churches, and schools. Land uses near at-grade crossings as well as the proposed stations in Pajaro, Castroville and Salinas, the Salinas ITC, and the layover facility were also identified.

The following description of the Coast Line covers the section of track between the Gilroy Station, located in southern Santa Clara County, and the Salinas Station, located in Monterey County. All milepost (MP) notations are based on the UPRR track inventory charts which are the basis of the at-grade crossing inventory and numbering system maintained by the California Public Utilities Commission.

Gilroy to Pajaro

Immediately south of the Gilroy station, the Coast Line track crosses 10th Street (MP 81.00) at-grade. Commercial and light industry surrounds 10th Street; there are no sensitive receptors within 400 feet of the crossing.

The line then traverses 0.7 mile of an industrial corridor before crossing Luchessa Avenue (MP 81.70) located in south Gilroy. Commercial and light industry surrounds Luchessa Avenue and there are no sensitive receptors within 400 feet of the crossing. Immediately south of Luchessa Avenue is the U.S. Highway 101 overcrossing (MP 81.88).

South of U.S. Highway 101 crossing, the Coast Line passes through commercial and light industrial land uses, and then predominately agricultural lands approaching Bolsa Road (MP 83.60). Prior to reaching Bolsa Road, the track curves south after passing Carnadero Road, a crossing that is used primarily by farm machinery. Two houses are adjacent to the track on the west side. At the Bolsa Road at-grade crossing, there are three houses within 400 feet of the crossing. There are also horse corrals and a stable within 400 feet of the crossing. South of Bolsa Road, farm industry and agricultural lands surround the rail corridor leading to the Bloomfield Road (SR 25) at-grade crossing. At this crossing (MP 84.00) there are no sensitive receptors within 400 feet.

South of Bloomfield Road (SR 25), the Coast Line runs in a north/south orientation before turning west to traverse the Chittenden Pass. From Bloomfield Road to the U.S. Highway 101 overpass (MP 86.36), the line passes through

agricultural lands. An historic freight building lies on the west side of the main line, just south of Bolsa Road. One farm house is adjacent to the railroad at the U.S. Highway 101 overcrossing. South of the U.S. Highway 101 overcrossing, the Coast Line runs parallel to the Pajaro River and passes by the Betabel Recreational Vehicle (RV) Park located just south of the Betabel/Y Road interchange with U.S. 101. On average, there are about 50 RVs in the park which is east of the Pajaro River, approximately one-half mile from the Coast Line track.

Just south of the RV Park, the Coast Line makes a 90 degree turn at MP 88.8 and the track runs for four miles as the mainline passes through the Santa Cruz Mountains following the Pajaro River bed. Chittenden Pass, at the west end of the gorge, defines this stretch of track. Midway through this segment, Riverside Road (SR 129) passes under the Coast Line at MP 90.93. West of the grade separated crossing, about 25 houses lie on the south side of the track, accessed by Old Chittenden Road. These houses are located more than 400 feet from the track.

The Coast Line next passes by the Granite Rock quarry, located on the south and east side of the railroad. The quarry is accessed by Quarry Road which connects with Aromas Road. There are two houses more than 400 feet from the track at a private crossing on the west side of the track.

Just to the west of the quarry, the Coast Line crosses Carpenteria Road at MP 94.50. Carpenteria Road provides primary vehicular access to the unincorporated village of Aromas. To the southwest of the at-grade crossing lies the Aromas School. Classrooms are beyond 400 feet from the track; however ball fields are within 400 feet. Houses and a church are all further than 400 feet from the track. Traveling west of the school, Kortwright Lane crosses the Coast Line track at MP 95.00 and provides access to agricultural lands located on the north side of the track.

As the Coast Line continues west through agricultural lands and to the San Juan Road at-grade crossing (MP 96.20), there is one house on the south side of the track within 400 feet of the crossing. The Coast Line then runs parallel to San Juan Road where there are two houses between the road and the track. These houses appear to be located about 300 feet from the track. About 0.6 mile west of the San Juan Road crossing, at San Miguel Canyon Road (MP 97.10), there are two houses on the north side of the track about 400 feet distant from the track.

Before the Coast Line begins to turn southward at the Watsonville Junction (MP 100.4), there are thirteen houses along Lewis Road located to the south of the two mainline tracks. A large, active railroad yard is adjacent to the mainline tracks at this location.

Pajaro to Castroville

The Lewis Road at-grade crossing (MP 100.5) is located at the south end of the Watsonville yard. It is immediately south of the Pajaro Rail Station which is no longer used for passenger rail service. A new Caltrain/Amtrak Station is proposed for this location. Adjacent to Lewis Road, on the west side of Salinas Road, there is one restaurant/bar, and several residences located approximately 400 feet to the northwest of the at-grade crossing. Just north of the Lewis Road crossing, there is also one house on the east side of the railroad located about 100 feet from the nearest track.

South of Lewis Road, the rail line passes through agricultural lands running parallel to Salinas Road. At MP 101.67, Elkhorn Road passes overhead, and there are no sensitive receptors within 400 feet of the track.

South of Elkhorn Road, the single track approaches the Elkhorn Slough which extends roughly from MP 103 to MP 107. As the track travels through the slough, there is a boat ramp at Kirby Road (MP 104.60) with no sensitive receptors located within 400 feet.

South of Elkhorn Slough, as the Coast Line runs south by southwest, there is a housing development just north of Dolan Road that lies about 200 feet from the track. Dolan Road crosses over the Coast Line track at MP 107.95 but is not listed in the CPUC reference file of mainline crossings. There is one house located more than 150 feet from the track on the south side of Dolan Road.

South of Dolan Road, the Coast Line runs through agricultural lands until it reaches the State Route (SR) 156 highway overcrossing in Castroville (MP 110.00). Just north of SR 156, a commuter rail Caltrain station is proposed for construction (Site #2). South of the SR 156 overcrossing, the Coast Line runs parallel to Del Monte Road through a mixed industrial/residential neighborhood (Alternative Castroville Site #1). In this section of track, between SR 156 and Blackie Road, there are about 30 apartments and about 50 houses on the west side of the track between approximately 200 feet to one-third mile away from the tracks. At Blackie Road (MP 110.60), industrial land uses surround the at-grade crossing and there are no sensitive receptors within 400 feet of the crossing.

Castroville to Salinas

South of Castroville, the Coast Line runs through agricultural lands and is parallel to SR 183 which is aligned to the west of the Coast Line. At the Espinosa Road at-grade crossing (MP 111.60), there are three houses north of Espinosa Road and one house south of Espinosa Road, all of which are on the east side of the track and within 400 feet of the crossing.

South of Espinosa Road, San Jon Road (MP 115.00) crosses the Coast Line track at-grade from the east, connecting to SR 183. There is one house located to the west of SR 183 which is located within 400 feet of the San Jon Road crossing.

South of San Jon Road, McFadden Road intersects with SR 183 to the west of the rail line. Graves School is located adjacent to this intersection but is greater than 150 feet from the track. Between McFadden Road and an old cemetery opposite Boronda Road, there are two houses on the west side of SR 183, both of which are greater than 150 feet from the track.

About one-half mile north of Davis Road (MP 117.23), Boronda Road dead ends about 100 feet from the track on the east side. There are no sensitive receptors within 150 feet.

Just north of the Davis Road overcrossing, there is a small housing complex with approximately ten or fewer residential units. These units are west of the track and beyond 150 feet.

South of Davis Road, the Coast Line enters the urbanized portion of Salinas. Between Davis Road and the Salinas Station (MP 118.2), land uses surrounding the rail corridor are primarily industrial, with some commercial. A small number of residential units are located on the south side of the track, adjacent to SR 183 which is known as West Market Street. These residences are located beyond 150 feet of the track. A small freight yard is also located adjacent to the Salinas Station Layover Yard.

Existing Ambient Noise

Ambient noise along the Caltrain project alignment consists of the following five primary sources: 1) train pass-bys, 2) train horn at-grade crossings, 3) vehicular traffic on surrounding highways and various surface roadways, and 4) various industrial activities. The secondary noise sources along the project alignment include heating and air conditioning units, commercial activities, and other common domestic sources. Depending on the proximity to the above noise source, the ambient noise of the adjacent communities varies substantially. But since the receptors of interest are all within close proximity (approximately within 400 feet) to the centerline of the tracks, the dominant noise source would be primarily the existing freight train operations.

Based on the provided existing freight train counts and operation data along the project corridor between (1) Gilroy and Pajaro/Watsonville, (2) Pajaro/Watsonville and Castroville, and (3) Castroville and Salinas, existing noise levels were estimated using FTA procedures. Table 3.10-1 shows the freight train operating data used for the analysis and Table 3.10-2 presents the resulting existing noise levels at various distances from the tracks centerline along the three segments of the corridor described.

Table 3.10-1

Existing Freight Train Operation Parameters

Freight Train Parameters	Along Project Corridor		
	From Gilroy to Watsonville (Pajaro)	From Watsonville (Pajaro) to Castroville	From Castroville to Salinas
Existing Daily Operations	20	17	15
Daytime (7am-10pm)	13	11	9
Nighttime (10p-7a)	7	6	6
No. of Locomotives	3	2	2
No. of Cars	32	27	31
Max. Speed, mph	40	40	40

Table 3.10-2

Existing Freight Train Operation Parameters

Corridor Segment	Distance to R/Track Centerline ⁽¹⁾ , feet	Existing Noise Levels ⁽²⁾ , L _{dn} , dBA
Gilroy to Pajaro (Watsonville)	50	65
	100	62
	200	59
	300	58
	400	57
Pajaro (Watsonville) to Castroville	50	65
	100	60
	200	58
	300	57
	400	56
Castroville to Salinas	50	65
	100	60

Corridor Segment	Distance to R/Track Centerline ⁽¹⁾ , feet	Existing Noise Levels ⁽²⁾ , L _{dn} , dBA
	200	58
	300	57
	400	56
<p>Notes:</p> <p>(1) Distance Measured from the centerline of the proposed tracks to the property line of the sensitive receptors.</p> <p>(2) Existing noise levels included the modeled existing freight train noise and typical ambient noise level for a suburban environment (55 dBA L_{dn}).</p>		

3.10.3 REGULATORY SETTING

Operation Noise Criteria

The criteria in the Transit Noise and Vibration Impact Assessment (USDOT, 1995) were used to assess existing ambient noise levels and future noise impacts from train operations. The criteria are founded on well-documented research on community reaction to noise and are based on change in noise exposure using a sliding scale. The amount that transit projects are allowed to change the overall noise environment is reduced with increasing levels of existing noise. The FTA noise impact criteria applicable to three categories of land use are summarized in Table 3.10-3.

Table 3.10-3

Land Use Categories and Metrics for Transit Noise Impact Criteria

Land Use Category	Noise Metric, dBA	Description of Land Use Category
1	Outdoor L _{eq} (h)*	Tracts of land where quiet is an essential element in their intended purpose. This category includes lands set aside for serenity and quiet, and such land uses as outdoor amphitheaters and concert pavilions, as well as National Historic Landmarks with substantial outdoor use.
2	Outdoor L _{dn}	Residences and buildings where people normally sleep. This category includes homes, hospitals, and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.
3	Outdoor L _{eq} (h)*	Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material. Buildings with interior spaces where quiet is important, such as medical offices, conference rooms, recording studios, and concert halls fall into this category. Places for meditation or study associated with cemeteries, monuments, and museums. Certain historic sites, parks, and recreational facilities are also included.

Note:

* L_{eq} for the noisiest hour of transit-related activity during hours of noise sensitivity.

Source: USDOT, 1995.

L_{dn} is used to characterize noise exposure for residential areas and hotels (Category 2). The maximum 1-hour L_{eq} during the period that the facility is in use is used for other noise-sensitive land uses such as school buildings and parks (Categories 1 and 3). Two levels or degrees of impact are included in the FTA criteria, as shown in **Figure 3.10-2**. The interpretation of these two levels of impact is summarized as follows:

- **Severe:** Severe noise impacts are considered "significant" as this term is used in NEPA and implementing regulations. Noise mitigation would normally be specified for severe impact areas unless there is no practical method of mitigating the noise; and
- **Impact:** In this range, other project-specific factors must be considered to determine the magnitude of the impact and the need for mitigation. These other factors can include the predicted increase over existing noise levels, the types and number of noise-sensitive land uses affected, existing outdoor-indoor sound insulation, and the cost-effectiveness of mitigating noise to more acceptable levels.

The horizontal axis in **Figure 3.10-2** represents the existing L_{dn} without any project noise, and the vertical axis (right side) is the L_{dn} at residential land uses caused by the project. Although the curves in **Figure 3.10-3** are defined in terms of existing noise exposure and project-generated noise exposure, it is important to emphasize that the increase in the cumulative noise (e.g., when the project noise is added to existing noise) is the basis for the land use criterion. **Figure 3.10-2** shows the noise impact criteria for Categories 1 and 2 in terms of the allowable increase in the cumulative noise exposure.

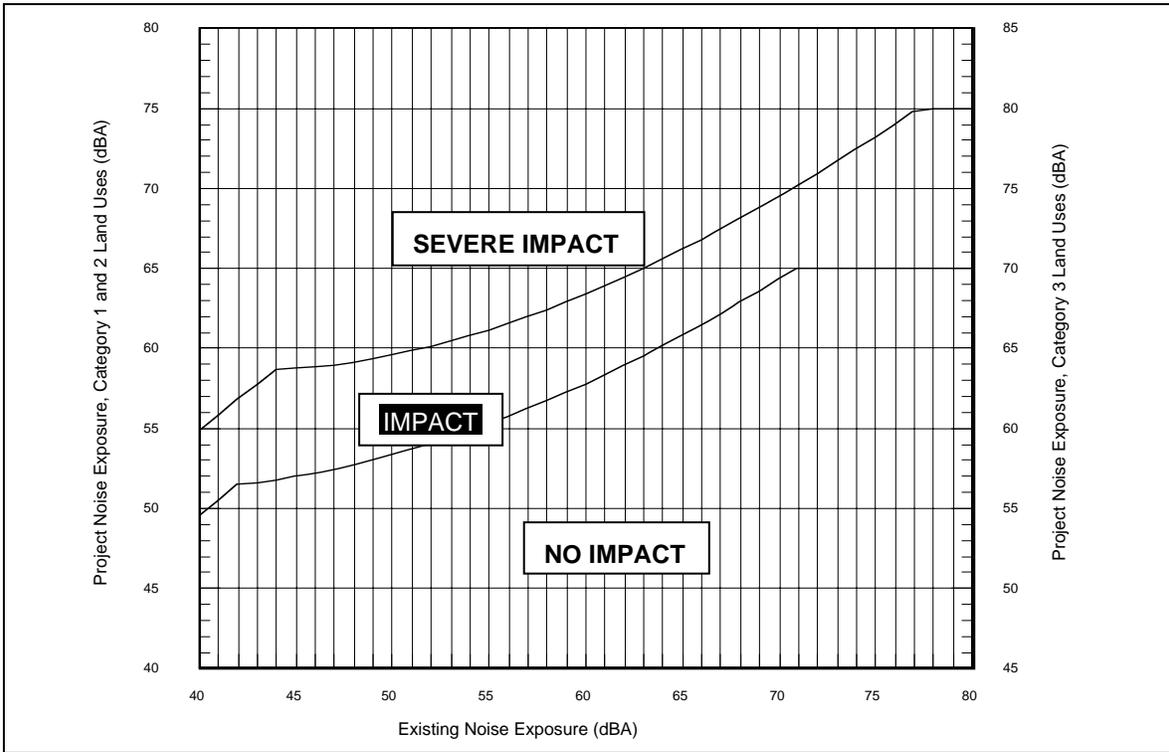
Figure 3.10-3 shows that the criterion for impact allows a noise exposure increase of 10 dBA if the existing noise exposure is 42 dBA or less but only a 1 dBA increase when the existing noise exposure is 70 dBA. As the existing level of ambient noise increases, the allowable level of project noise increases, but the total allowable increase in community noise exposure is reduced. This reduction accounts for the result: project noise exposure levels that are less than the existing noise exposure can still cause impact.

Construction Noise Criteria

FTA has not yet developed standardized criteria for assessing construction noise impact. However, FTA recommends allowable construction noise limits as guidelines for a transit project. **Table 3.10-4** presents the recommended noise limits for the project. These limits are for 8-hour average noise levels (L_{eq}) at the property line of the nearest location to the construction site.

Figure 3.10-2

Noise Impact Criteria for Transit Projects



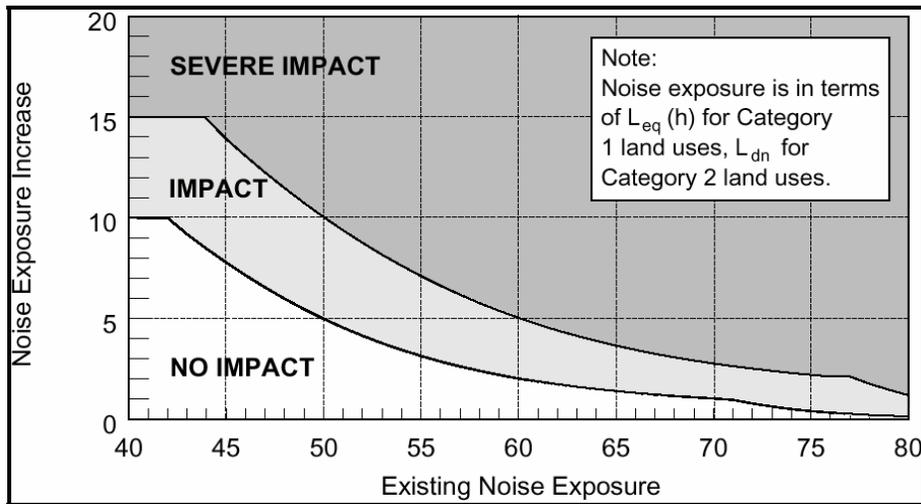
Note:

Exposure is in terms of $L_{eq}(h)$ for Categories 1 and 3 land uses, and L_{dn} for Category 2 land uses.

Source: USDOT, 1995.

Figure 3.10-3

Increase in Cumulative Noise Levels Allowed by Criteria



Source: USDOT, 1995.

Table 3.10-4

Allowable Construction Noise Levels

Land Use	Daytime (7 AM to 10 PM) Leq*, dBA	Nighttime (10 PM to 7 AM) Leq*, dBA
Residential	80	70
Commercial	85	85
Industrial	90	90
Note: * Leq for 8 hours.		

Source: USDOT, 1995.

There are several jurisdictions along the project alignment, each with different noise limits and restricted hours. **Table 3.10-5** summarizes construction noise ordinances of jurisdictions along the alignment.

Generally, local ordinances are not practical for compliance since it requires adhering to various limits under several jurisdictions. Applying the universal and most stringent criteria throughout the corridor would provide clarity regulatory agencies. By comparison of **Tables 3.10-4** and **3.10-5**, it is obvious that FTA-recommended daytime and nighttime construction noise levels are more stringent criteria. Therefore, the FTA construction noise criteria were used for the entire project.

Table 3.10-5

Summary of Local Noise Ordinances for Construction

Local Jurisdictions	Allowable Noise Levels at Sensitive Receptors, dBA	Time of Allowance
Monterey County	85 dBA at 50 feet from source; Limit exempt if source is at least 2,500 feet from any occupied dwelling unit	--
Watsonville	--*	7 AM – 10 PM
City of Salinas	--*	7 AM – 9 PM
Note: * No quantifiable noise limits are imposed for construction activities.		

Sources: City of Salinas, 2005; City of Watsonville, 2005; County of Monterey, 2004.

Vibration Criteria

Vibration impacts from train operations are regulated by the criteria in the *Transit Noise and Vibration Impact Assessment* (USDOT, 1995). The evaluation of vibration impacts can be divided into two categories: (1) human annoyance; and (2) building damage.

Human Annoyance Criteria

Table 3.10-6 presents the criteria for various land use categories as well as the frequency of events. The criteria are related to ground-borne vibration causing human annoyance or interfering with the use of vibration sensitive equipment. The criteria for acceptable ground-borne vibration are expressed in terms of root-mean-square (RMS) velocity levels in VdB and are based on the maximum levels for a single event (Lmax).

Table 3.10-6

Groundborne Vibration Impact Criteria for Human Annoyance

Land Use Category	Ground-Borne Vibration Impact Levels (dB ref. 1 micro-inch/sec)	
	Frequent ¹ Events	Infrequent ² Events
Category 1: Buildings where low ambient vibration is essential for interior operations.	65 VdB ³	65 VdB ³
Category 2: Residences and buildings where people normally sleep.	72 VdB	80 VdB
Category 3: Institutional land uses with primarily daytime use.	75 VdB	83 VdB
Notes: ¹ "Frequent Events" is defined as more than 70 vibration events per day. ² "Infrequent Events" is defined as less than 70 vibration events per day. ³ This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.		

Source: USDOT, 1995.

All sensitive receptors within the project boundary (e.g., residences and hotels) would fall under Land Use Category 2. If the number of train operations for a proposed transit project is more than 70 per day; the FTA guidelines consider the potential impacts as "frequent events." Thus, the maximum vibration level of 72 VdB should be used as a project criterion. The FTA guidelines consider less than 70 train pass-bys per day as "infrequent events;" therefore, the maximum vibration level of 80 VdB should be used as a project impact criterion. Since this project only involves eight operations per day, the "Infrequent Event" impact level of 80 VdB would apply.

Building Damage Criteria

Normally, vibration resulting from a train passing by would not cause building damage. However, damage to fragile historic buildings located near the right-of-way could be a concern. Vibrations generated by surface transportation are mainly in the form of surface or Raleigh waves. Studies have shown that the vertical component of transportation-generated vibrations is the strongest, and that peak particle velocity (PPV) correlates best with building damage and complaints. FTA provides a vibration damage threshold criterion of 5 mm/s (0.20 inches/second, approximately 100 VdB) PPV for fragile buildings and 3 mm/s (0.12 inches/second, approximately 90 VdB) PPV for extremely fragile historic

buildings with typical construction equipment operation (USDOT, 1995). The FTA recommends these criteria to be used as a damage threshold for the fragile structures located near the right-of-way of a transit project.

3.10.4 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The following significance criteria were used to evaluate noise impacts associated with the proposed Project (Table 3.10-7).

3.14.5 METHODOLOGY

This section analyzes the effect of the commuter rail operation on the ambient noise levels at various noise sensitive land uses along the project corridor: residences and schools. This includes the operation pass-by noise as well as horn noise. Stationary noise emanating from supporting facilities such as passenger stations and rail yards would influence the future ambient noise around the facilities. Review of the vehicular traffic study indicated that the expected traffic volumes resulting from the project would not significantly increase the traffic noise levels in surrounding areas.

The FTA General Transit Noise assessment Model was used for the analysis of train pass-by noise and stationary noise. Horn noise was assessed using the FRA Grade Crossing Noise Model. Also assessed was the noise levels associated with the construction of the project. For purposes of the worst case analysis, the one-locomotive plus six-car train configuration was used for the proposed commuter rail, and four daily round trips (or eight operations) between Gilroy and Salinas were used.

Train Operational Noise

Procedures outlined in the FTA's Transit Noise and Vibration Impact Assessment (USDOT, 1995) were used to predict train pass-by noise levels at noise sensitive locations along the proposed alignment. Project train operation noise levels were predicted at various fixed distances from the track centerline for various segments along the corridor to assess the effects on current noise sensitive land uses and for future planning purposes.

The parameters used for the future commuter train operations are shown in **Table 3.10-8**. As indicated by the results of the noise prediction presented in **Table 3.10-9**, no noise impacts are expected to result from the operation of the commuter rail. Noise impact would occur for any sensitive receptor located within 50 feet of the track centerline; there is currently no existing noise sensitive receptor situated within this distance.

Table 3.10-7

**Evaluation Criteria with Point of Significance
Noise**

Evaluation Criteria	As Measured by	Point of Significance	Justification
1. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Predicted noise levels	Varies based on existing noise levels per FTA criteria	Monterey County General Plan, Chapter VI, Health and Safety Element, Policy HS-5.4; 5.5 City of Salinas General Plan, Noise Element
2. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	Expected levels	FTA criteria	Monterey County General Plan, Chapter VI, Health and Safety Element, Policy HS-5.4 City of Salinas General Plan, Noise Element
3. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	Predicted noise levels	Varies based on existing noise levels per FTA criteria	Monterey County General Plan, Chapter VI, Health and Safety Element, Policy HS-5.4, 5.5 City of Salinas General Plan, Noise Element
4. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	Predicted noise levels	Varies based on existing noise levels per FTA criteria	Monterey County General Plan, Chapter VI, Health and Safety Element, Policy HS-5.7 City of Salinas General Plan, Noise Element
5. 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 expose people residing or working in the project area to excessive noise levels?	Predicted noise levels, and review of project vicinity and pertinent background noise information	Based on Local as well as applicable federal agencies, i.e., FAA or Air Force	Monterey County General Plan, Chapter VI, Health and Safety Element, Policy HS-5.5; 5.8 City of Salinas General Plan, Noise Element
6. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	Predicted noise levels, and review of project vicinity and pertinent background noise information	Based on Local as well as applicable federal agencies, i.e., FAA or Air Force	Monterey County General Plan, Chapter VI, Health and Safety Element, Policy HS-5.4; 5.8 City of Salinas General Plan, Noise Element

Source: County of Monterey, 1982; City of Salinas, 2002

Table 3.10-8

Future Commuter Rail Operation Parameters

Commuter Train Parameters	Along Project Corridor		
	From Gilroy to Watsonville (Pajaro)	From Watsonville (Pajaro) to Castroville	From Castroville to Salinas
Future Daily Operations	8	8	8
Daytime (7am-10pm)	5	5	5
Nighttime (10p-7a)	3	3	3
No. of Locomotives	1	1	1
No. of Cars	6	6	6
Max. Speed, mph	55	60	60

Table 3.10-9

Summary of Commuter Rail Operation Noise Impacts

Corridor Segment	Land Use Category ¹	Distance to Centerline ² , feet	Existing Noise Levels ³ , L _{dn} , dBA	Criteria, Impact / Severe Impact, dBA	Project Train Noise Levels ⁴ , L _{dn} , dBA	Degree of Impact ⁵
Gilroy to Pajaro (Watsonville)	2	50 ⁶	65	61/67	61	Impact
		100	62	59/65	56	None
		200	59	58/64	52	None
		300	58	57/63	49	None
		400	57	57/63	47	None
Pajaro (Watsonville) to Castroville	2	50 ⁶	65	61/67	61	Impact
		100	60	58/64	57	None
		200	58	57/63	52	None
		300	57	57/63	49	None
		400	56	56/63	48	None
Castroville to Salinas	2	50 ⁶	65	61/67	61	Impact
		100	60	58/64	57	None

Corridor Segment	Land Use Category ¹	Distance to Centerline ² , feet	Existing Noise Levels ³ , L _{dn} , dBA	Criteria, Impact / Severe Impact, dBA	Project Train Noise Levels ⁴ , L _{dn} , dBA	Degree of Impact ⁵
		200	58	56/62	52	None
		300	57	55/61	49	None
		400	56	54/60	48	None

Note:

1. Land Use Category: Category 2: residences; Category 3: schools, churches, parks, and recreational facilities.
2. Distance Measured from the centerline of the proposed tracks to the property line of the sensitive receptors.
3. Existing noise levels included the modeled existing freight train noise and typical ambient noise level for a suburban environment (55 dBA Ldn).
4. Calculated based on four daily round-trips daily.
5. Degree of Impact can include: None (No Impact), Impact, and Severe, as defined by the FTA in its criteria for impacts.
6. There are no existing sensitive receptors located within this distance.

Horn Noise

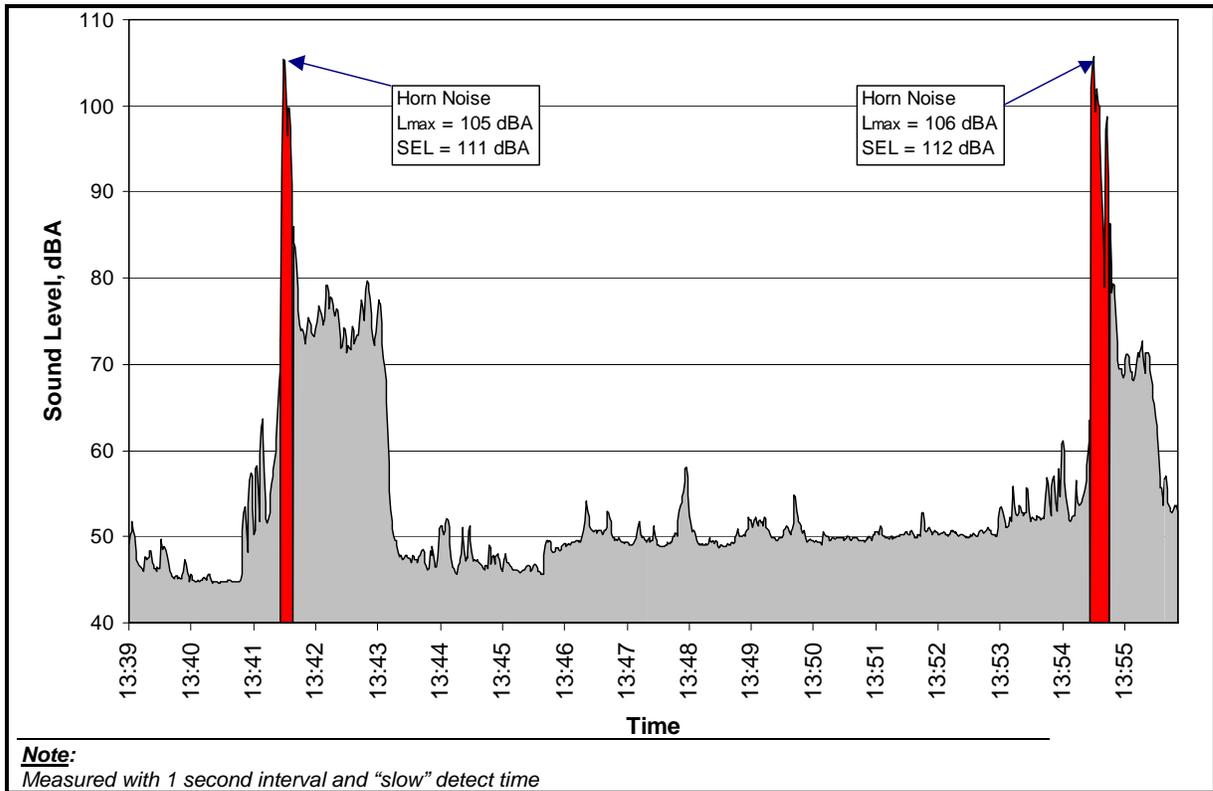
Train horns are typically installed on top of locomotives to warn motorists or pedestrians of approaching trains at at-grade crossings. In many locations and throughout most of the year, motor vehicles operate with their windows rolled up and/or air conditioning systems and radios in use. Therefore, audible warning signals must be sufficiently loud to be perceived. Pursuant to federal guidelines, the warning device should produce a minimum sound level of 96 dBA at 100 feet forward of the locomotive in its direction of travel. The horn noise would be clearly audible at sensitive residences near various at-grade crossings.

Figure 3.10-4 shows a horn noise time-history measured of a typical freight train pass-by at an at-grade crossing, at approximately 100 feet away from the tracks. The graph shows a sharp increase of noise in a short period of time, resulting in potential annoyance to residents living near at-grade crossings.

The FRA Horn Noise model determines impact and severe impact distances based on calculated horn noise levels and comparisons with the estimated existing noise levels (calculated using existing train operations data). Noise impact criteria used are based on noise exposure increases.

Figure 3.10-4

Typical Horn Noise Time History Measurements



Source: Parsons

The results of the horn noise impact analysis are summarized in **Table 3.10-10**. It is anticipated that a total of 12 residential structures would be impacted by horn noise at several at-grade crossings along the project corridor. Between Gilroy and Pajaro, three residences at the Bolsa Road crossing, and two residences at the San Juan Road crossing would experience noise levels that exceed the FTA impact criteria. Between Pajaro and Castroville, the criteria would be exceeded at two residences – one at the Lewis Road crossing and the other at Dolan Road. Horn noise levels at a total of five residences are expected to exceed the FTA impact criteria, with four at the Espinosa Road crossing and one at San Jon Road. The degree of impact, as designated by the FTA, for all 12 structures is "Impact." No "Severe Impact" is anticipated to occur.

Stationary Noise

A total of three proposed passenger stations (Pajaro, Castroville, and Salinas Stations) would be constructed or expanded along the proposed alignment. These proposed stations would be outdoor facilities; therefore, HVAC noise due to heating or cooling of the interior would not occur.

Table 3.10-10

Summary of Horn Noise Impact Analysis

At-Grade Crossing	Type of Sensitive Receptors At or Near Crossing ⁽¹⁾	Approximate Distance to Track Centerline, ft	Impact Distance at Crossing, ft		Degree of Impact ⁽²⁾	Impacted Structures ⁽³⁾
			Impact	Severe Impact		
Gilroy to Pajaro						
10th Street	None	--	286	64	--	--
Luchessa Ave	None	--			--	--
Bolsa Road	Residences	<300			Impact	3 SFR
Bloomfield Road	None	--			--	--
Stony Ford Road	None	--			--	--
Carpenteria Road	None	--			--	--
Kortwright Lane	None	--			--	--
San Juan Road	Residences	<300			Impact	2 SFR
San Miguel Canyon Road	Residences	<300			Impact	
Pajaro to Castroville						
Lewis Road	Residences	100	357	66	Impact	1 SFR
Kirby Road	None	--			--	--
Dolan Road	Residences	150			Impact	1 SFR
Balckie Road	None	--			--	--
Castroville to Salinas						
Espinosa Road	Residences	<300	365	67	Impact	4 SFR
San Jon Road	Residences	150			Impact	1 SFR
Total Number of Impact Structures						12 SFR
Notes:						
(1) Within 400 feet of rail alignment/tracks centerline.						
(2) There are two degrees or levels of impact as defined by the FTA criteria; they are "Impact" and "Severe Impact."						
(3) SFR - single family residence;						

Vehicle movement in and out of park-and-ride lots would generate a combination of car passby, car horn and door slamming noise. Noise from these sources fluctuate significantly and occur unpredictably. At all three stations, there are sensitive receptors located within 500 feet. The FTA General Transit Noise Assessment Model was utilized to calculate the expected noise levels generated by the park-and-ride lots at the stations. Noise levels were analyzed using the predicted daily daytime and nighttime automobile and bus arrivals and departures at the stations, and the closest distance between the center of the nearest lot to the nearest sensitive receptor.

- Pajaro: At the proposed Pajaro Platform site, the model resulted in an Ldn of 47 dBA, a daytime Leq of 39 dBA and a nighttime Leq of 40 dBA. These noise levels would be much below the existing ambient L_{dn} noise levels of

approximately 55 dBA for the given setting. No increase in ambient noise level is expected. Thus, no significant impact is anticipated.

- **Castroville:** An L_{dn} of 36 dBA was predicted at the closest residence to the proposed Castroville platforms (Sites 1 and 2). Compared to the presumed ambient noise level of at least 55 dBA, no increase in the overall noise levels is anticipated at the closest sensitive receptors near Castroville station locations.
- **Salinas:** Noise levels predicted at closest sensitive receptors to the Salinas station and the layover facility would range between 45 and 57 dBA Ldn. Given the more densely populated setting at the Salinas facilities, the overall ambient noise levels in the vicinity of these are not expected to have any substantial increase. Therefore, no impact is anticipated.

Construction Noise

The construction activities that would generate substantial noise are: (1) site preparation; (2) track work; and (3) supporting facility construction. Noise impacts from construction activities are a function of the noise generated by construction equipment, the location of activities, the sensitivity of nearby land uses, and the timing and duration of the noise generating activities. Normally, construction activities are carried out in stages, and each stage has its own noise characteristics based on the mix of construction equipment in use. The noise levels created by construction equipment vary greatly, depending on factors such as the type of equipment, the specific model, the operation being performed, and the condition of the equipment. Noise level of a construction activity also depends on the fraction of time that the equipment is operated, and it is known as equipment usage rate. Overall, construction noise levels are governed primarily by the noisiest piece of equipment.

Table 3.10-11 summarizes some of the available data on noise emissions of construction equipment from the FTA “Train Noise and Vibration Impact Assessment” (USDOT, 1995) and recent experience with major construction projects. Although the noise levels in the table represent typical values, there can be wide fluctuations in the noise emissions of similar equipment. Using typical sound emission levels in Table 3.10-11 and the duration of operation, it is possible to estimate L_{eq} at various distances from the construction site. Table 3.10-12 summarizes the estimated L_{eq} at various distances and different construction phases.

The estimated construction noise levels in **Tables 3.10-11 and 3.10-12** were compared to the construction noise limits listed in **Tables 3.10-4 and 3.10-5** to identify any potential noise-impacted areas. Although the construction process would affect the noise environment at certain areas, the noise impact would be temporary. The following paragraphs analyze the construction potential noise impacts categorized by each construction activity, unless the receptors are located as close as 50 feet from the construction sites.

Table 3.10-11

Typical Construction Equipment Noise Emission Levels

Equipment	Typical Noise Level (L _p) from Source, dBA		Equipment	Typical Noise Level (L _p) from Source, dBA	
	At 50 ft	at 100 ft		at 50 ft	at 100 ft
Backhoe	80	74	Jackhammer	91*	85
Ballast Equalizer	82	76	Impact Wrench	78*	72
Ballast Tamper	83	77	Loader	85	79
Compactor	85*	79	Pavement Breaker	88	82
Compressor	81	75	Paver	89	83
Concrete Mixer	85	79	Pneumatic Tool	85	79
Concrete Pump	82	76	Pump	76	70
Concrete Vibrator	76	70	Roller (vibratory)	81*	75
Crane, Derrick	88	82	Scraper	89	83
Crane, Mobile	83	77	Shovel	82	76
Dozer	85	79	Tie Handler	80	74
Excavator	85*	79	Tie Inserter	85	79
Generator	81	75	Various Trucks	82*	76
Grader	85	79	Welding Machine	82*	76

Note:
* Based on Parsons measurements.

Source: USDOT, 1995.

Otherwise, no significant noise impacts are expected for those located at least 100 feet away, provided that no construction activities would occur during restricted nighttime hours.

- **Site Preparation:** The construction activities for this phase would include grading and soil removal to prepare sites for track work. Residences that are approximately 100 feet center of the site would experience the temporary construction L_{eq} of 77 dBA.
- **Track work:** The construction activities for this phase would include the placement of fill material, subballast and ballast, excavation of existing embankment material, rail and tie installation, and track adjustment. Subballast would be brought on the site via major streets, placed, and compacted by vibratory roller. Construction activities associated with installing rails and ties are spiking ties, securing track, welding, grinding, and tampering the ballast. Residences at approximately 100 feet from the edge of track would experience the temporary construction L_{eq} of 74 dBA. No sensitive receptors are located this close to the tracks.
- **Facility/Station Construction:** Nine passenger stations would be constructed along the alignment. Although some stations are located in commercial or industrial areas, some of them are adjacent to residential areas. Earthwork to

clear and grading would be initially required prior to building a structure. The noise level would be similar to the level listed for site preparation. Cranes would be required to erect the shelter at station platforms. Residences at approximately 100 feet from the edge of track would experience the temporary construction L_{eq} of approximately 76 dBA.

Table 3.10-12

Estimated Construction Noise Levels

Construction Activity	Number of Equipment Vehicles	Sound Level at 50 ft (dBA)	Effective Usage Factor	Leq, dBA			
				@ 50 ft	@ 100 ft	@ 200 ft	@ 300 ft
Site Preparation							
Grader	1	85	0.15	77	71	65	61
Backhoe	1	80	0.15	72	66	60	56
Loader	2	85	0.30	80	74	68	64
Dump Truck	2	82	0.12	73	67	61	57
Water Truck	1	82	0.21	75	69	63	60
Leq for Construction Activity =				83	77	71	68
Trackwork							
<u>Ballast Compaction</u>							
Vibratory Roller	1	81	0.15	73	67	61	57
Loader	2	85	0.18	78	72	66	62
Dump Truck	2	82	0.12	73	67	61	57
Water Truck	1	82	0.06	70	64	58	54
Leq for Construction Activity =				80	74	68	65
<u>Track Installation</u>							
Crane	1	85	0.06	73	67	61	57
Flatbed Trucks	1	85	0.03	70	64	58	54
Welding Machine	1	82	0.15	74	68	62	58
Tie Handler	2	80	0.06	68	62	56	52
Ballast Tamper	1	83	0.09	73	67	61	57
Tie Cutter	1	84	0.03	69	63	57	53
Leq for Construction Activity =				79	73	67	64
Stations**							
Crane	2	85	0.06	73	67	61	57
Backhoe	1	80	0.03	65	59	53	49
Pneumatic Tools	2	85	0.30	80	74	68	64
Compressor	1	81	0.24	75	69	63	59
Leq for Construction Activity =				82	76	70	66

* Assuming that the equipment are operating at, or near, their maximum sound levels 30 percent of the time during operation.

** Assumed to be also similar for Intermodal Transportation Centers and Layover facilities.

3.10.6 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION MEASURES

IMPACT: **NO-1: Would the Project expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of lead or responsible agencies?**

Analysis: *Significant; LPA, Alternate Castroville Site*

As shown in Table 3.10-9 and discussed in Section 3.10-5, no operation noise impacts are expected to result from the project associated with train pass-bys. Horn noise is expected to exceed the FTA criteria; thereby, horn noise impacts are expected to occur at twelve residences at or near several at-grade crossings along the corridor as shown in Table 3.10-10.

Mitigation: **NO-1: Utilize special horn designs or establish quiet zones.**

In order to meet safety requirements of the FRA, a minimum sound level of a horn on each lead locomotive shall be 96 dBA at 100 feet forward of the locomotive in its direction of travel. Various treatment and mounting options of the train horn can minimize horn noise impact while achieving FRA's safety requirements. Such options include:

- Use of a specially designed, unidirectional, shrouded and muffled on-board warning horn.
- Evaluation and designation of "quiet zones" along the corridor throughout the entire project area. Establishing a quiet zone throughout the commuter rail corridor would address not only horn noise from proposed commuter trains, but could reduce or eliminate existing horn noise from existing freight trains as well. In a quiet zone, because of improvements at the at-grade crossings, train operators would sound warning devices only in emergency situations rather than as a standard operational procedure.

After
Mitigation *Less than Significant*

Implementation of Mitigation Measure NO-1 would reduce impacts resulting from operation noise to less than significant.

IMPACT: **NO-2: Would the Project expose persons to or generate excessive groundborne vibration or groundborne noise levels?**

Analysis: *No Impacts; LPA, Alternate Castroville Site*

Due to the low daily frequency of the proposed train pass-bys and the distance of sensitive receptors to the proposed tracks and stations, no groundborne vibration or noise is expected.

Mitigation: No mitigation necessary.

IMPACT: NO-3: Would the Project cause a substantial permanent increase in ambient noise levels in the project vicinity?

Analysis: *Less than Significant*; LPA, Alternate Castroville Site

No significant permanent increase in ambient noise levels would occur throughout much of the project except at a few at-grade crossings identified in Table 3.10-10.

Mitigation: Implementation of Mitigation Measure NO-1 would reduce any impacts at the few at-grade crossings to less than significant.

IMPACT: NO-4: Would the Project cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity?

Analysis: *Significant*; LPA, Alternate Castroville Site

Even though the construction criteria are not expected to be exceeded, temporary and intermittent increase in noise levels is expected due to the nature of construction activities.

Mitigation: **NO-4: Implement Best Management Practices during construction of the project.**

The following Best Management Practices (BMPs) shall be implemented during construction of the project:

- Use newer equipment with improved noise muffling and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine covers, and engine vibration isolators intact and operational. Newer equipment will generally be quieter in operation than older equipment. All construction equipment should be inspected at periodic intervals to ensure proper maintenance and presence of noise control devices (e.g., mufflers and shrouding, etc.).
- Perform all construction in a manner to minimize noise. Utilize construction methods or equipment that will provide the lowest level of noise. The contractor should be required to select construction processes and techniques that create the lowest noise levels.
- Perform independent noise and vibration monitoring to demonstrate compliance with the noise limits, and especially in particularly sensitive areas. Require contractors to modify and/or reschedule their construction activities if monitoring determines that maximum limits are exceeded at residential land uses.

- Conduct truck loading, unloading, and hauling operations so that noise and vibration are kept to a minimum by carefully selecting routes to avoid going through residential neighborhoods to the greatest possible extent.
- Select construction lay-down or staging areas in industrially zoned districts. If industrially zoned areas are not available, commercially zoned areas may be used, or locations that are at least 100 feet from any noise sensitive land use such as residences, hotels, and motels. Ingress and egress to and from the staging areas should be on collector streets or greater (higher street designations are preferred).
- Turn off idling equipment.
- Minimize construction activities during evening, nighttime, weekend, and holiday periods. Permits may be required in some cities before construction can be performed in noise sensitive areas between 9:00 PM and 7:00 AM.
- Require the construction contractor by contract specification to comply with all local noise and vibration ordinances and obtain all necessary permits and variances.
- Temporary noise walls and curtains can be constructed to mitigate impacts. These walls and curtains are readily deployable and can be moved from site to site with relative ease.
- Temporary noise enclosures can be constructed to mitigate the noise from heavy equipment during evening hours.

After
Mitigation

Less than Significant

Implementation of Mitigation Measure NO-4 would reduce impacts resulting from temporary construction noise to less than significant.

IMPACT: **NO-5: 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 expose people residing or working in the project area to excessive noise levels?**

Analysis: *No Impact; LPA, Alternate Castroville Site*

The project is not located within an airport land use plan or within two miles of a public airport.

Mitigation: No mitigation necessary.

IMPACT: **NO-6: For a project within the vicinity of a private airstrip, would the Project expose people residing or working in the project area to excessive noise levels?**

Analysis: *No Impact*; LPA, Alternate Castroville Site

The project is not located within the vicinity of a private airstrip.

Mitigation: No mitigation necessary.

3.10.7 CUMULATIVE IMPACTS

IMPACT: **NO-1c: Will the Project have the potential to generate cumulative noise impacts in excess of standards or cause a substantial increase in noise levels above existing levels in the project vicinity?**

Analysis: *Potentially significant*; LPA, Alternate Castroville Site

Noise levels from construction of the stations would be short-term and intermittent. For operation noise impacts, at its inception, the service would consist of two round trips per weekday running from Salinas to Gilroy and would be increased to four or more round trips after five years or as passenger demands require. This service would be in addition to the other rail lines that use the tracks such as freight trains.

Mitigation: Regionally, noise impacts from increased service on the rail lines could be minimized by implementation of additional noise abatement methods such as construction of soundwalls and limited use of train horns, as described above in Mitigation Measure NO-1.

After

Mitigation: Less than significant.

3.10.8 CONCLUSION

With implementation of the above-referenced mitigation measures, noise impacts resulting from the proposed project and alternatives would be reduced to less than significant.

3.10.9 REFERENCES

City of Salinas, 2005. *Salinas Municipal Code*, August.

City of Watsonville , 2005. *Watsonville Municipal Code*, August.

County of Monterey, 2004. *Monterey County Code*, September.

County of Monterey, 1982. *Monterey County General Plan*.

U.S. DOT, 1995, U.S. Department of Transportation, Transit Noise and Vibration Assessment. Washington, D.C.

3.11 SOCIO-ECONOMICS

3.11.1 INTRODUCTION AND SUMMARY OF IMPACTS

This section discusses the project’s potential effects on socio-economics, including population and housing. To provide a basis for this evaluation, the setting section provides information on existing economics, population and housing in the project area. This section does not address land use issues. The following items are related to socio-economics and housing but are evaluated in other sections of this document:

- **Land Use and Planning.** Issues regarding consistency with existing General Plan and zoning designations and with land use policies are discussed in Section 3.8.

A summary of socio-economic impacts and mitigation measures is presented below. Full analyses of the impacts are included in Section 3.11.6.

<i>IMPACT</i>	<i>SIGNIFICANCE BEFORE MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>SIGNIFICANCE AFTER MITIGATION</i>
PH-1: Would the Project induce substantial 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)?	Significant	PH-1A: Implement Monterey County and City of Salinas Growth Management Policies PH-1B: Implement TAMC Transportation-Related Principles	Less than significant
PH-2: Would the Project displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?	Potentially significant	PH-2: Implement procedures for residential acquisition and relocation consistent with City of Salinas Redevelopment Agency requirements and the federal Uniform Act (49 CFR 24C Section 24.205).	Less than significant
PH-3: Would the Project displace substantial numbers of existing businesses or jobs, requiring relocation of businesses or employees elsewhere?	Potentially significant	PH-3: Implement procedures for business property acquisition and relocation consistent with City and County requirements and the federal Uniform Act (49 CFR 24C Section 24.205).	Less than significant
PH-1c: Would the Project have the potential to have a cumulative impact on population, housing, or socio-economics?	Less than significant	No mitigation is necessary.	Less than significant

3.11.2 ENVIRONMENTAL SETTING

The project purpose is to provide extended Caltrain service from the existing terminus in Gilroy to Monterey County. This includes stations in Pajaro, Castroville, and Salinas to relieve congestion, provide residual capacity, improve regional air quality, increase regional ridership, and provide transportation alternatives for commuters and residents traveling from Monterey County and southern Santa Cruz County to the San Francisco Bay Area. In addition to lowering congestion on the roadways, the commuter rail extension would bring a significant increase in ridership to the existing Caltrain service. Other benefits to this new service include an increase in job opportunities, access to jobs from affordable housing, more transportation alternatives for senior citizens and those with physical disabilities, increased access by students to educational resources, and economic development opportunities along the train route.

Description of Proposed Project Sites

Pajaro Passenger Station at Site #1 (Watsonville Junction)

There are no existing housing units or occupants at the Pajaro site. A small equipment storage area is located at the site, just south of the existing passenger rail station building (which is currently used by UPRR yard operations personnel).

Castroville Passenger Station at Site #2

There are no existing housing units or occupants, commercial or industrial businesses at Castroville Station Site #2. However, the site is situated on existing agricultural fields that are currently in production.

Castroville Passenger Station at Site #1

Castroville Passenger Station Site #1 would be adjacent to Del Monte Avenue south of State Route 156. This area is surrounded by industrial land uses. There are no existing housing units or occupants at Castroville Station Site #1. The area adjacent to the station on the west side of Del Monte Avenue, which would be used to provide parking at the site, is currently used for agricultural processing support operations. Agricultural businesses currently occupying the site of the parking area include Ag Services, Inc.; Associated Produce Distributors; Sweet Darling Strawberries, and Vegetable Grower's Supply.

Salinas Layover Yard Facility at Site #2 and Intermodal Transportation Center

Although there are no existing housing units within the layover yard facility, the area designated for the extension of Lincoln Avenue into the ITC is currently occupied by a multi-family dwelling unit located at 17 Station Place. This residential use, doing business as the "Waldorf Hotel," is comprised of two multi-

family residential buildings. The main building is a two-story structure that contains a gross building area of approximately 3,600 square feet. The interior is composed of 15 one-room residential units and a studio apartment. The ground floor and second floor each have a common shower and restroom facility for use by the occupants. The individual rooms have a sink, but no restroom or kitchen. The interior finish consists of linoleum floor covering through the building, and painted and textured gypsum board walls and ceilings. The overall quality of construction is low cost and present condition is good. This is a very old building that was recently remodeled (Parsons, 2005).

The rear building contains a gross building area of approximately 1,400 square feet. This is a multi-tenant designed building that is in very poor condition. Some windows are broken out, there are several roof leaks, and wall and ceiling finishes are crumbling. It is an old building that is in very poor condition and is currently uninhabitable (Parsons, 2005). Several commercial retail and warehouse businesses are also located in this area.

Environmental Justice

Under Executive Order 12898, effective February 1994, consideration of environmental justice involves an examination of income and ethnicity patterns in relation to the environmental impacts of planning and development decisions to determine whether governmental actions create unreasonable biases that disadvantage low-income and/or minority residents or provide advantages to higher-income or non-minority residents.

Racial and Ethnic Populations

Monterey County. The communities of Pajaro and Castroville are unincorporated areas of Monterey County. According to the findings of the 2000 U.S. Census, approximately 47% of Monterey County's population (unincorporated and incorporated areas) was identified as being of Hispanic/Latino background. Of the total 401,762 persons reported in the 2000 Census data for Monterey County, 187,969 identified themselves as of Hispanic/Latino background and the remaining 213,793 persons were identified as non-Hispanic/Latino (Monterey County, 2003).

Salinas. Based on the 2000 U.S. Census, the City's population is 64% Hispanic, 45% White, 6% Asian, 3% African-American, and 1% Native American (U.S. Census Bureau, Census 2000 Demographic Profile for 2000, City of Salinas, www.factfinder.census.gov, 2006).

Income Levels

Monterey County. The 2000 U.S. Census data reports median income for the calendar year 1999. According to that data, the median household income for Monterey County was \$48,305 annually. The information below compares

Monterey County’s median household income with that of neighboring counties and the State (Monterey County, 2003).

Geographic Area 1999 Median Household Income

Monterey County	\$48,305
Santa Cruz County	\$53,998
San Luis Obispo County	\$42,428
Santa Clara County	\$74,335
State of California	\$47,493

Source: U.S. Census, 2000

At the time that the Monterey County Housing Element was prepared (2003), the 2000 U.S. Census data regarding household income according to the income categories of lower, moderate and above moderate was not yet available. Based on 1990 U.S. Census data for the County of Monterey (unincorporated and incorporated areas), approximately 22% of all households could be considered very low income and another 19% of households as low income.

The State of California, Department of Finance, has estimated that there were 34,762 households as of January 1, 2002 in the unincorporated areas of Monterey County. The chart below demonstrates the estimated number of households by income category using the 1990 household income percentage distributions as applied to the 2002 Department of Finance household estimates.

Household Income:	Very Low	Low Income	Moderate Income	Above Moderate	Unincorporated Area Total
Number of Households (Percentage of Total)	7,648 (22%)	6,605 (19%)	8,690 (25%)	11,819 (34%)	34,762 (100%)

Information provided in the Housing Element (Monterey County, 2003) indicates that the two major industries in Monterey County are tourism and agriculture. The average annual wage in the “agricultural industry cluster” in Monterey County is approximately \$18,608, which is considered very low income for households of 2 persons or more. Tourism related jobs are also traditionally very low paying. Households with members who rely on employment in either or both of these fields could be expected to qualify as either very low or low income, depending on household size.

Salinas. The 1990 Census indicates that 49.85% of Salinas’ population is of low and moderate income. The City of Salinas’ economy is predominantly agriculturally oriented, with relatively low-skilled, low-paying jobs (City of Salinas, 2002).

3.11.3 REGULATORY SETTING

Federal Policies

The Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act), passed by Congress in 1970, is a federal law that establishes minimum standards for federally funded programs and projects that require the acquisition of real property (real estate) or displace persons from their homes, businesses, or farms. The Uniform Act's protections and assistance apply to the acquisition, rehabilitation, or demolition of real property for federal or federally funded projects. 49 CFR Part 24 is the government-wide regulation that implements the Uniform Act.

Local Policies

Monterey County General Plan

Adopted by the Board of Supervisors in 1982, The Monterey County General Plan contains several Goals and Policies in the Environmental Constraints Chapter (Chapter III) and County Development Chapter (Chapter IV) that apply to the present proposed project. The Goals, Policies, Actions, and Programs having to do with Natural Resources, Seismic Hazards, Flood Hazards, Air Quality, Water Quality, Demography, Land Use, and Transportation are pertinent to the project and are discussed in applicable sections of this document (Monterey County, 1982). The County of Monterey is currently updating its General Plan (Monterey County, 2004). The Draft is available for public review, but has not been adopted.

North County Land Use Plan and Local Coastal Program

Properties in northern Monterey County within the coastal zone governed by the California Coastal Commission (CCC) are subject to the North County Land Use Plan (LUP). The LUP, one of four segments of the Monterey County Local Coastal Program (LCP), was certified by the CCC in June 1982. There have been several amendments to the LCP by the CCC since that time. The LCP is accompanied by the Monterey County Coastal Implementation Plan (Monterey County, 1988). One of the sites of the proposed project, the proposed Castroville Passenger Rail Station and parking area at Site 2, is within the coastal zone covered by the LUP, and will be subjected to an analysis of conformity with the LCP.

The California Coastal Commission, in cooperation with Monterey County, is conducting a periodic review of Monterey County's Local Coastal Program (LCP), which includes the North County Land Use Plan certified by the CCC on June 3, 1982. The California Coastal Act provides that the Commission periodically review the implementation of local coastal programs to determine whether the LCP is effectively carrying out the goals and policies of the Coastal Act. The review is focusing on implementation of the LCP and resource changes

occurring in Monterey County's coastal zone since 1988, the year when the Coastal Commission certified the LCP and the County began issuing coastal development permits. The Commission held a public scoping process in 2002 to solicit input from a wide range of individuals and agencies. Commission staff reviewed County implementation procedures, such as its coastal permitting process, and presented them to the Coastal Commission for consideration in 2003 to coincide with Monterey County's 21st Century General Plan Update. In 2004, the Draft 21st Century General Plan Update was published for public review, and is currently still in the process of being finalized and adopted.

Castroville Community Plan

Monterey County Redevelopment Agency is in the process of preparing a community plan for Castroville. The plan is designed to guide growth and development in the community, and would require amendment of the Monterey County General Plan to redesignate the area covered by the Community Plan as a Community Plan area. A Notice of Preparation for an Environmental Impact Report evaluating the proposed plan was issued on June 6, 2005. The Castroville Community Plan has not been adopted.

The Community Plan includes a passenger rail facility to serve the new Caltrain service extension from Salinas to the Santa Clara Valley. Preliminary ridership forecasts indicate that initially only 100 riders would be expected to board and return at the Castroville station each day. This number would increase with population growth and increased acceptance of the rail service as a viable option for commuters. In suburban locations commuter rail facilities can sometimes provide an opportunity for convenience retail/food service businesses. As passengers board the trains they may purchase coffee and snack items, magazines, newspapers and the like.

The Castroville train station is being planned to be integrated into a mixed income residential neighborhood. A small amount of convenience commercial use directed at commuters and surrounding residents may be supportable. Although initially, the majority of the passengers are anticipated to be from outside of Castroville, in the long term, passenger train service is viewed as an important advantage for Castroville residents to access the high quality jobs and cultural experiences located in Southern Santa Clara Valley and the Bay Area.

Development in Castroville Site No. 2 area is envisioned to be visually and functionally related to the train station, which will serve as a focal point. High quality residential mixed income neighborhoods will be developed around the station with a mixed-use development at the eastern edge, consisting of residential and commercial uses. The development will also allow for the train station to be physically connected to the Castroville community while also connecting the Moro Cojo neighborhood, the North Monterey County High School, and a planned middle school (all located to the east of the existing Castroville Boulevard) with the rest of the community located to the west.

Salinas General Plan

The City’s 2002 General Plan Update was considered by the Salinas Planning Commission and adopted by the Salinas City Council in late 2002. The Salinas General Plan applies to the Salinas Layover Yard Facility and Intermodal Transportation Center.

Table 3.11-1 identifies goals, objectives, and policies regarding population and housing. The table also indicates which land use evaluation criteria are responsive to each set of policies.

Table 3.11-1

General Plan Goals, Objectives, and Policies: Socio-Economics

Plan Document	Document Section	Document Reference	Policies	Relevant Evaluation Criteria
Monterey County 1982 General Plan	Chapter III: Human Resources, Social and Economic Setting	Goal 23, Encourage Coordination of Public and Private Resources for Economic Development	Policy 23.2.2 The County shall continue to pursue state and federal funds for economic development projects in targeted portions of the unincorporated area.	1, 3
			Policy 23.2.4 The County shall participate in, sponsor, and coordinate activities with other local governments which address the County's economic problems.	1, 3

Plan Document	Document Section	Document Reference	Policies	Relevant Evaluation Criteria
City of Salinas 2002 General Plan	Housing Element: Issues, Goals, and Policies	Goal H-1: Provide a range of housing opportunities to adequately address existing and projected needs of Salinas.	Policy H-1.2: New residential developments shall be adequately served by services and facilities, including park and recreation areas, libraries, sanitary and storm sewers, transportation, public safety and other services. Ensure impact fees are adequate to provide these services and facilities to residential development.	1, 2
			Policy H-1.3: Identify adequate sites to facilitate and encourage housing production for the existing and projected housing needs of the City.	1, 2
			Policy H-1.6: Ensure that new residential development and reuse/revitalization projects are compatible with surrounding neighborhoods.	2, 3
			Policy H-1.8: Encourage the development of higher density apartments, townhouses and condominiums served by major transit corridors or other non-automotive transport.	2

Source: Monterey County 1982 General Plan; City of Salinas 2002 General Plan; CEQA Guidelines 2005; CEQ NEPA Regulations 2005.

3.11.4 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The following significance criteria were used to evaluate population and housing impacts associated with the proposed Project (Table 3.11-2).

Table 3.11-2

Evaluation Criteria with Point of Significance
Socio-economics

Evaluation Criteria	As Measured by	Point of Significance	Justification
1. Would the Project induce substantial 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)?	Direct or indirect increase in population	An increase that would require the construction of new housing	CEQA Guidelines Appendix G
2. Would the Project displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?	Loss of housing in the Project area	Any loss of housing that would require the construction of new housing	CEQA Guidelines Appendix G
3. Would the Project displace substantial numbers of existing businesses or employees, requiring relocation elsewhere?	Loss of businesses and jobs in the Project area	Any lost business or job that could not be relocated in the project area.	CEQ NEPA Regulations (40 CFR 1508[b]; 1508.14)

Source: Monterey County General Plan; Salinas General Plan; CEQA Guidelines,; 40 CFR 1508 (b); 1508.14

3.11.5 METHODOLOGY

Population and employment changes would be considered economic or social effects. CEQA Section 15131 states, “Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The focus of the analysis (in an EIR) shall be on the physical changes”.

CEQA also states, “It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment (Section 15126.2, subd. (d)).” The potentially significant environmental impacts associated with changes in population, employment, and housing (e.g. public services, air quality, traffic) are analyzed in other chapters in this EIR.

CEQ NEPA Regulation 40 CFR 1508.14, states that economic or social effects on the human environment must be discussed when economic or social and natural or physical environmental effects are interrelated.

3.11.6 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION MEASURES

IMPACT: PH-1: **Would the Project induce substantial 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)?**

Analysis: *Significant*; LPA, Alternate Castroville Site

Construction of new commuter rail passenger transportation infrastructure would directly foster economic and population growth. The project could help to accommodate the projected population of the City of Salinas and Monterey County General Plan. The project could indirectly cause an increase of residential use in the areas around the train stations.

Mitigation: **PH-1A: Implement Existing County and City of Salinas Growth Management Policies.**

The Monterey County General Plan includes policies for managing growth. The County would designate growth areas only where there is provision for an adequate level of services and facilities such as water, sewerage, fire, and police protection, transportation and schools. Phasing of development shall be required as necessary in growth areas in order to provide a basis for long-range services and facilities planning. Future growth would be managed to minimize impacts to the existing communities and surrounding agricultural lands by maintaining a compact city form and directing urban expansion to the North and East, away from the most productive agricultural land (Monterey County, 2004).

TAMC supports transit-oriented development (TOD) because the population of Monterey County is projected to grow by 30% in the next 20 years. The form that growth takes will have a critical impact on how well our transportation system functions and the quality of life in our communities. Developing transit-oriented town centers and neighborhoods will help Monterey County accommodate this growth, while maintaining its rural heritage. Increasing the supply of affordable housing in existing communities close to jobs, services, and transit reduces the demand on regional road and freeway networks and increases transit ridership and transit service to bring Monterey County residents closer to the places they want to be. To encourage TOD types of projects, TAMC adopted a Transportation for Livable Communities Grant program, modeled after the Metropolitan Transportation Commission (MTC).

TAMC is working to establish a Regional Development Impact Fee program in Monterey County to account for the proportional impact of new development on regional transportation infrastructure, and further streamline the existing system for analyzing and mitigating transportation

impacts. The proposed Regional Development Impact Fee program is being developed to provide a mechanism through which “growth pays for growth” and the county’s projected transportation needs can be met.

Transportation impacts of new development are currently analyzed and addressed on a piecemeal, project-by-project basis through the CEQA environmental review process. Projects are analyzed individually by each of the county’s 13 land use jurisdictions and regional traffic mitigation’s assessed on an ad hoc basis, making this process time consuming, expensive, and inconsistent. The TAMC Regional Development Impact Fee program would streamline the existing ad hoc environmental review system. Regional transportation impacts of planned development across the county will be analyzed through the program, eliminating the need for expensive traffic analyses from each new development project, and the current lengthy negotiations over appropriate mitigations. In instances where a local traffic impact fee is already assessed, the local and cumulative traffic impacts of development would be accounted for through payment of fees. No additional analysis is required aside from that which is needed to address the localized, project-specific impacts of new development on surrounding transportation infrastructure.

PH-1B. Implement TAMC Transportation-Related Principles.

TAMC aims to develop and maintain a multimodal transportation system that enhances the mobility, safety, access, environmental quality, and economic activities in Monterey County.

The purpose of the transportation-related principles is to reduce future impacts to Monterey County’s regional transportation system, reduce the cost of transportation infrastructure, and improve TAMC’s ability to meet Monterey County’s regional transportation needs. TAMC recommends that new land use development in the county adhere to the following set of principles, which emphasize developing a land use pattern that is supportive of non-single occupant auto modes of transportation so as to maximize the carrying-capacity of Monterey County’s existing regional transportation infrastructure.

1. Land Use

- **1.a** Encourage mixed use developments to accommodate short trips by non-auto modes
- **1.b** Encourage growth in areas where transportation infrastructure exists or is most cost-effective to extend
- **1.c** Encourage a balance of employment and housing to reduce regional commute demands
- **1.d** Encourage higher residential densities in core areas or around transit stops to support regular transit service throughout the region

- **1.e** Encourage land use jurisdictions to utilize the Caltrans Traffic Impact Studies Guide or develop traffic impact study guidelines of their own when analyzing the impacts of growth on the regional transportation system.
- **1.f** Require new development to pay for its proportional impact to the transportation system, preferably via regional and local fee programs, or on-street project construction.

2. Street Network Design

- **2.a** Provide an interconnected street system for new development to facilitate short trips by non-auto modes of transportation.
- **2.b** Incorporate traffic calming features into the street network to slow the flow of traffic and enhance the pedestrian environment.
- **2.c** Design streets to accommodate all modes of transportation.

3. Site Design

- **3.a** Orient buildings to face the street in new development to improve access for pedestrians from sidewalks
- **3.b** Incorporate residential uses over commercial uses in commercial areas to encourage trips by foot, bike, or transit and improve access by each of these modes
- **3.b** Incorporate reduced building setbacks, especially in commercial areas, to reduce the length of pedestrian trips and facilitate easy access
- **3.c** Locate on-site parking to the rear of structures or underground
- **3.d** Provide pedestrian facilities connecting building entrances with the street where parking is not provided to the rear of structures to enhance pedestrian access and safety
- **3.f** Incorporate bicycle storage facilities into site plans to accommodate access by bicyclists

4. Transportation Demand Management

- **4.a** Encourage telecommuting in non-residential development as a traffic mitigation measure
- **4.b** Encourage flexible work schedules for employees as a traffic mitigation measure
- **4.c** Encourage employers to utilize available rideshare programs or create their own
- **4.d** Encourage employers to offer transit incentives to employees to mitigate traffic impacts
- **4.e** Provide preferential carpool or vanpool parking in non-residential developments
- **4.e** Encourage large employers to offer child care facilities as resources allow and encourage all employers to provide information on nearby child care resources
- **4.f** Locate child care facilities near employment centers

After
Mitigation *Less than Significant*

Implementation of Mitigation Measures PH-1A and PH-1B would reduce impacts resulting from population growth to less than significant.

IMPACT: PH-2: Would the Project displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?

Analysis: *Potentially Significant Impact; LPA, Alternate Castroville Site #1*

There are no existing housing units or occupants on the Pajaro or Castroville project sites. However, the extension of Lincoln Avenue at the Salinas facility would require the removal of a multi-family dwelling unit (the “Waldorf” boarding house) and relocation of its residents.

Mitigation: **PH-2: Implement procedures for residential acquisition and relocation consistent with City of Salinas Redevelopment Agency requirements and the federal Uniform Act (49 CFR 24C Section 24.205).**

During Project implementation, procedures for all residential acquisition and relocation will be identical to those now employed by the City of Salinas Redevelopment Agency in accordance with the Uniform Act. Residential tenants will be provided relocation assistance, moving expenses and possibly compensation to account for rent differentials in neighborhoods with comparable housing stock.

TAMC will follow provisions of all applicable Federal and State regulations for property acquisitions and relocations. In accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and the California Relocation Act (Chapter 16, Section 7260 et seq of the Government Code), TAMC will provide relocation assistance to any person, business, farm or nonprofit organization displaced as a result of the acquisition of real property for public use. These acts establish uniform and equitable procedures for land acquisition and provide for uniform and equitable treatment of persons displaced from their homes, businesses or farms by government assisted programs.

A final relocation plan for all residences shall be developed prior to condemnation of the residential buildings. This document would be based on the information gathered in the survey of owners and residents, as described in the Preliminary Property Acquisition and Relocation Plan (Parsons, 2005) and would set forth the procedures, payments, special considerations and other elements of the process.

After
Mitigation *Less than significant.*

The project would displace approximately 15 residential units and their occupants from the existing Waldorf Hotel multi-family dwelling.

However, implementation of Mitigation Measure PH-2 in accordance with the Uniform Act, would reduce impacts resulting from displacement of housing and residents in Salinas to less than significant. Additionally, the project would most likely promote future construction of residential units near the ITC, including increased affordable housing opportunities.

IMPACT: PH-3: Would the Project displace substantial numbers of existing businesses or jobs, requiring relocation of businesses or employees elsewhere?

Analysis: *Potentially Significant Impact; LPA and Alternate Castroville Site*

Business uses to be acquired include farmland, paved equipment storage areas, office, retail, industrial, and warehouse facilities. Most of these business uses are located in Salinas at the ITC and Caltrain layover facility.

Construction of the passenger rail station at Pajaro will necessitate relocation of a small equipment storage area located just south of the existing rail passenger rail station building (which is currently used by UPRR yard operations personnel). The relocation plan assumes that this equipment storage yard can be relocated to adjacent UPRR lands which are currently vacant.

The Castroville Station Site #2 would require the conversion of 9 acres of prime farmland for rail station use. Castroville Station Site #1 is occupied by agricultural processing businesses.

The proposed parking facility expansion under both options at the Salinas ITC and Caltrain layover site includes several commercial retail and warehouse businesses that would require relocation. Salinas ITC expansion Option 17 would require demolition and remodel of approximately 1,500 square feet of a recent (2004) 9,544 square foot warehouse expansion. Option 17 would also reduce the size of the potential 19,072 square foot expansion being planned by American Supply. ITC expansion Option 18 also assumes a full take of the American Supply warehouses and adjacent lands.

A Preliminary Property Acquisition and Relocation Plan was prepared by Parsons for TAMC for the proposed project on September 19, 2005 (Parsons, 2005). Similar to residential owners, business property owners will be compensated for their property and/or provided relocation assistance in accordance with the federal Uniform Act.

Mitigation: **PH-3: Implement procedures for business property acquisition and relocation consistent with City and County requirements and the federal Uniform Act (49 CFR 24C Section 24.205).**

During Project implementation, procedures for all business acquisition and relocation for sites within the City of Salinas or County of Monterey will be identical to those now employed by the City of Salinas Redevelopment

Agency and the County of Monterey in accordance with the federal Uniform Act. Business owners will be provided relocation assistance, moving expenses and possibly compensation to account for rent differentials in areas with comparable business locations. To the extent feasible, the applicant will diligently attempt to relocate businesses within the County of Monterey or the City of Salinas in order to retain the region's economic base.

Records from the City of Salinas indicate there are several vacant properties of 5 acres or more currently available within the city limits (City of Salinas Redevelopment Agency, 2005) where industrial or commercial businesses can be relocated.

TAMC will follow provisions of all applicable Federal and State regulations for property acquisitions and relocations. In accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and the California Relocation Act (Chapter 16, Section 7260 et seq of the Government Code), TAMC will provide relocation assistance to any person, business, farm or nonprofit organization displaced as a result of the acquisition of real property for public use. These acts establish uniform and equitable procedures for land acquisition and provide for uniform and equitable treatment of persons displaced from their homes, businesses or farms by government assisted programs.

A final relocation plan will be developed during Project implementation. This document would be based on the information gathered in the survey of business owners and tenants, as described in the Preliminary Property Acquisition and Relocation Plan (Parsons, 2005) and would set forth the procedures, payments, special considerations and other elements of the process.

After
Mitigation

Less than Significant.

Implementation of Mitigation Measure PH-3, in accordance with the Uniform Act, would reduce impacts resulting from displacement and relocation of businesses and employees in Salinas to less than significant. In addition, the project would promote future construction of business sites near the ITC and train stations, providing additional opportunities for the expansion of existing businesses and attraction of new businesses to the area.

3.11.7 CUMULATIVE IMPACTS

IMPACT: PH-1c: Would the Project have the potential to have a cumulative impact on population, housing, or socio-economics?

The proposed project could have an indirect affect on the local population near the proposed stations. Beneficial impacts to community cohesion and quality of life would also occur for residents and businesses near the proposed rail stations. Residential property values could potentially increase slightly near transit stations. Higher density housing and mixed use developments would most likely occur near rail stations, which could provide additional affordable housing units to the communities. However, increased property values could lead to development of more market-rate housing since commuting to higher-paying job areas such as Silicon Valley and San Francisco would be facilitated by construction and operation of the proposed project.

Employment growth at the proposed station sites would result mostly from a redistribution of existing employment. Access to regional jobs and educational and entertainment opportunities would increase for residents living near proposed rail stations, including environmental justice populations. Cumulative growth would be managed such that growth would be consistent with the policies of the County General Plan (Monterey County, 2004).

3.11.8 CONCLUSION

With implementation of the above-referenced mitigation measures, socio-economic impacts resulting from the proposed project and alternatives would be reduced to less than significant.

3.11.9 REFERENCES

City of Salinas 2002, *Salinas General Plan*, September 2002.

City of Salinas Redevelopment Agency, 2005. Correspondence with Alan Stumpf, Potential 5+ Acres of Vacant Relocation Sites in Salinas. September 16.

Monterey County 1982a, *Monterey County General Plan*, adopted by the Board of Supervisors, September 30, 1982

Monterey County 1982b, *North County Land Use Plan (Local Coastal Program)*, certified June 1982

Monterey County 1988, *Monterey County Coastal Implementation Plan Part 2, Regulations for Development in the North County Land Use Plan Area*, adopted January 5, 1988

Monterey County 2003, *Monterey County General Plan Housing Element 2002-2008, October 2003*, adopted by the Board of Supervisors, November 4.

Parsons, 2005. *Preliminary Property Acquisition and Relocation Plan, Caltrain Extension to Monterey County*. Prepared for TAMC. September 19.

U.S. Census Bureau, 2000. Population, Housing Units, Area, and Density: 2000.

3.12 PUBLIC SERVICES, UTILITIES, AND SERVICE SYSTEMS

3.12.1 INTRODUCTION AND SUMMARY OF IMPACTS

This section discusses impacts of project changes on service standards due to increased demands for police, fire, water, wastewater treatment and disposal, solid waste disposal, parks and recreation facilities, schools and libraries. It also discusses impacts on service standards resulting from disruption of such services or increases in response times due to the project. To provide a context for these analyses, the setting section provides information on current levels of service for the project area. The setting section also provides a summary of the General Plan policies for the City of Salinas and the County of Monterey regarding provision of services.

Impacts Evaluated in Other Sections

The following issues are related to the Public Services and Utilities Section but are evaluated in other sections of this document:

- Section 3.14, Transportation, evaluates the impact of construction traffic on bikeways and bicycle travel, and traffic control requirements and emergency vehicle access.
- Section 3.10, Noise, evaluates construction noise impacts on public facilities.
- Section 4.4, Growth Inducement, evaluates the indirect impacts associated with the proposed project resulting from an increase in population and tourism in the areas near the train stations.

A summary of public services and utility impacts and mitigation measures is presented below. Full analyses of the impacts are included in Section 3.12.6.

<i>IMPACT</i>	<i>SIGNIFICANCE BEFORE MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>SIGNIFICANCE AFTER MITIGATION</i>
PSU-1: Will the Project increase demand for police, fire, water, wastewater treatment and disposal, or solid waste removal to such a degree that accepted service standards are not maintained?	Less than significant	No mitigation is necessary.	Less than significant

<i>IMPACT</i>	<i>SIGNIFICANCE BEFORE MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>SIGNIFICANCE AFTER MITIGATION</i>
PSU-2: Will project construction disrupt police, fire, water, wastewater treatment and disposal, or solid waste removal to such a degree that accepted service standards are not maintained?	Less than significant	No mitigation is necessary.	Less than significant
PSU-3: Will the project construction and/or permanent operation result in greater demand for school, library, and park facilities and services?	Less than significant	No mitigation is necessary.	Less than significant
PSU-C1: Will the project have significant cumulative impacts to public services and utility resources?	Less than significant	No mitigation is necessary.	Less than significant

3.12.2 ENVIRONMENTAL SETTING

Public Services

Fire Protection

Pajaro and Castroville - Monterey County

The proposed passenger platform sites at Pajaro and Castroville would be serviced by the North County Fire Protection District, an independent special district formed pursuant to the Health and Safety Code. The District maintains its headquarters at 11200 Speegle Street in Castroville. It is governed by an elected five-member Board of Directors. The District currently has three fire stations located throughout its service area as shown in Table 3.12.1.

The District has 35 full-time firefighters and an authorized strength of 30 reserve (i.e., part-time paid) firefighters. The full-time firefighters consist of one Fire Chief, two Division Fire Chiefs, a Fire Marshal, nine Fire Captain, three Lieutenants, and 14 Firefighters. The Administrative staff consists of an Administrative Assistant, Administrative Secretary, and Secretary. The District's 911-dispatch service is provided by the Monterey County Consolidated Emergency Fire Dispatch Center. The Dispatch Center is staffed by full time dispatchers and supplemented by professional firefighters providing emergency fire and dispatch service for the entire county.

Table 3.12-1

North County Fire District of Monterey County Fire Stations

Station Number	Location	Capacity/Capabilities
Station No. 1 (HQ) (1 mile northwest of Castroville site)	11200 Speegle Street Castroville	Each station has a minimum: Three-person fully staffed Type 1 Engine Co. Type III wildland engine One Reserve engine Specialized apparatus available to each station in the District: Two water tenders (tankers) 1 rescue truck One 75-foot ladder truck
Station No. 2 (8 miles east of Castroville site)	17639 Pesante Road Prunedale	
Station No. 3 (2 miles south of Pajaro site)	301 Elkhorn Road Las Lomas/Pajaro	

Source: Monterey County General Plan 1982, NCAP 2001.

Salinas

The Salinas City Fire Department is responsible for protecting life, property and the environment from the hazards of fire, explosion and hazardous materials incidents and for providing emergency paramedic service. The Department is organized into three main Divisions: Administration, Emergency Operations and Fire Prevention. To provide a timely response, several fire stations are strategically located throughout the City (see Table 3.12.2). Each fire station houses an Engine Company and is staffed 24 hours per day. The Fire Department strives to achieve a five-minute response time to emergency medical and fire calls (Salinas Fire and Emergency Medical Service Master Plan). The location and capacity of each station in Salinas is shown below. The Salinas Layover Yard Facility and ITC Expansion are located within the response area of Fire Station No. 1. The project site is less than 0.5 miles from the fire station.

All engine companies are staffed with three personnel. The truck and rescue companies are staffed with two personnel each. The current minimum daily staffing is 23 personnel (including the Battalion Chief). The goal of the department is to arrive on the scene of emergencies within six minutes of notification, 90 percent of the time. Currently, the department is able to meet the goal 86 percent of the time. Response time is defined as the period of time that elapses from the moment the fire station is notified by the Monterey County 911

Table 3.12-2

Salinas City Fire Department Fire Stations

Station Number	Location	Capacity/Capabilities
HQ	65 W. Alisal Street, #20	n/a
Fire Station No. 1	216 W. Alisal Street	1 engine, 1 truck, 1 rescue, 1 paramedic engine, 1 battalion chief at all times
Fire Station No. 2	10 West Laurel Drive	1 engine, 1 paramedic engine
Fire Station No. 3	827 Abbott Place	1 engine, 1 paramedic engine
Fire Station No. 4	308 Williams Road	1 engine, 1 paramedic engine
Fire Station No. 5	1400 Rider Avenue	1 engine, 1 paramedic engine
Fire Station No. 6	45 East Bolivar Street	1 engine, 1 paramedic engine

Source: Salinas General Plan EIR, June 2002.

Communications Center, until that unit’s arrival at the location of the incident. Response time includes a one minute benchmark of “turn out time” (time necessary for the firefighters to don protective clothing, identify the destination, travel route, hydrant location, and place the fire apparatus into operation) and five minutes of “travel time.”

Police

County of Monterey

The Monterey County Sheriff’s Department Patrol Division is broken into three regional response areas or stations. These patrol stations operate from the Central (Salinas), Coastal (Monterey), and South County (King City) areas. The office has 86 Deputies, 15 Sergeants, and three (3) Commanders assigned to patrol. The Division, under the command of Patrol Division Captain, provides a full range of law enforcement and related emergency response services to a resident population of 105,000+ in an area of 3,350 square miles.

The Sheriff’s office strives to uphold a service standard of one deputy per 1,000 persons in each beat. Currently, there is an overall deficit of 23 deputies to meet the desired level of service. The number of deputies in each station and the additional number required to meet standards are shown in Table 3.12.3, below.

Table 3.12-3

Monterey County Sheriff's Department Deputy Count

Sheriff Station	Current Deputies	Additional Deputies Needed
Coastal Station	22	6
Central Station	49	21
South County Station	18	4
TOTAL	89	31

Source: Monterey County General Plan EIR, March 2002, updated based on Sheriff's Department website (<http://www.co.monterey.ca.us/sheriff/patrol.htm>).

Pajaro and Castroville

Police services at Pajaro and Castroville would be provided by the Monterey County Sheriff's Department Patrol Division Central Station in Salinas, which patrols all of North County, the Salinas Valley south to Gonzales and west, halfway to Monterey. The Salinas station has an authorized strength of 60 personnel. There are two Station Commanders, six Sergeants, 49 Deputy Sheriffs and a non-sworn crime prevention specialist staff the station, covering approximately 1,400 square miles. The Salinas Patrol area is divided into five beat areas, which extend south, to the town of Gonzales, west to Monterey and north to the county line meeting with Santa Cruz. These beats contain agricultural, industrial, residential, recreational and undeveloped rural areas (including parts of the former Fort Ord). The Patrol Division also includes the following law enforcement divisions: General Investigations, Narcotics, K-9 Unit, Crime Prevention, SWAT Team, Hostage/Crisis Negotiation, Search and Rescue, and Records Division.

The Township of Castroville has contracted for additional law enforcement service under the authority of a county service area to provide an additional 70 hours of patrol within the community each week. These deputies work out of the Salinas station. There are an additional two deputies funded by Proposition 172 to work the unincorporated area of Pajaro for a total of 80 hours per week.

City of Salinas

The City of Salinas Police Department is currently staffed with 166 sworn police officers, 104 of those being assigned to the uniform patrol division. The Department's field operations, while providing general police services to the community, also incorporate several sub units into daily operations. Patrol operates twenty-four hours a day during three 10-hour watches.

The Salinas Police Department is divided into four Area Commands each of which is the responsibility of one of four lieutenants of the department. The

Salinas project site would be within the South Command area. In addition, the field operations division also includes: a Traffic Unit, K-9 Unit, Crime Scene Investigators Unit, Special Operations, and the Violence Suppression Unit.

Schools

Monterey County School Districts - Pajaro and Castroville

North Monterey County Unified School District

In Monterey County, there are 27 school districts. The communities of Pajaro and Castroville are part of the North Monterey Unified School District. Recent enrollment and capacities for the kindergarten and primary, middle, and high schools in the North Monterey County Unified School District are shown in Table 3.12-4, below.

Table 3.12-4

North Monterey County Unified School District, 2003-2004

Name	Location	Capacity	Enrollment
Castroville Elementary School (K-5)	11161 Merritt St., Castroville	700	494
Echo Valley Elementary School (K-5)	147 Echo Valley Road, Salinas	650	541
Elkhorn Elementary School (K-5)	2235 Elkhorn Road, Castroville	650	625
Prunedale Elementary School (K-5)	17719 Pesante Road, Salinas	650	524
Elementary School Total		2,650	2,184
Gambetta Middle School (5-8)	10301 Seymour Street, Castroville	650	473
Moss Landing Middle School (6-8)	1815 Salinas Road, Moss Landing	650	546
Middle School Total		1,300	1,019
North County High School (9-12)	13990 Castroville Blvd., Castroville	1,650	1,558
Central Bay High School (9-12)	17500 Pesante Road, Salinas	120	74
High School Total		1,770	1,632
Total		5,720	4,835

Source: North Monterey County Unified School District
(www.greatschools.net), June 2005.

North Monterey County Unified suffers from the lack of existing infrastructure such as basic as municipal water and sewer systems. The recent defeat of local bond issues will delay the upgrade of those rural school buildings that are over 30 years old, some working on septic tanks and water wells, and which cannot support the additional electrical load of computers. The schools currently bus for racial integration, and bus routes often require difficult or dangerous access to and from some of the busiest highways in the county.

City of Salinas

Salinas’s public schools are operated by two K-6 districts (Salinas City Elementary and Alisal Union School District), one K-8 district (Santa Rita School District), and one 7-12 district (Salinas Union High School District). In addition to the public schools, there are also private secular and religious academic schools, continuation high schools, and adult and vocational schools. Information on each of the City of Salinas public schools is provided below.

Alisal Union School District

The Alisal Union School District has the following 10 elementary schools (K-6) in the East Salinas area (Table 3.12-5).

Table 3.12-5

Alisal Union School District – Elementary Schools, 2003-2004

Name	Location	Capacity	Enrollment
Alisal Community	1437 Del Monte Avenue	850	764
Cesar E. Chavez	1225 Towt Street	750	778
Frank Paul School	1300 Rider Avenue	800	784
Jesse G. Sanchez (K-3)	901 N. Sanborn Avenue	800	581
Dr. Oscar F. Loya	1505 Cougar Drive	800	758
Bardin	425 Bardin Avenue	850	832
Creekside	1770 Kittery Street	750	698
Fremont	1255 E. Market Street	825	779
John E. Steinbeck	1714 Burlington Drive	575	601
Virginia Rocca Barton	680 Las Casitas Drive	850	791
Martin Luther King Junior (4-6)	Sanborn Road	800	501
Total		8,650	7,867

Source: Alisal Union School District
www.greatschools.net, June 2005.

Overcrowding is an issue for several District schools where enrollments are close to or above capacity. The migrant population in East Salinas requires available space for students, though it is only used during part of the year. The District estimates that approximately 38 percent of the total enrollment is comprised of migrant students. Overcrowded housing conditions, in addition to a high degree of transience, makes enrollment projections particularly difficult, and enrollment varies significantly during the year.

Salinas City Elementary School District

The Salinas City Elementary School District is the largest K-6 district in Salinas, with 13 schools (Table 3.12-6). The District boundary, with the exception of Boronda School, is within the City of Salinas. The District experienced a 20 percent growth rate during the 1990s. Construction of additional school sites within the district is difficult, due to limited available land for development. The District has limited or no space for additional growth in its existing sites, and continues to look at all alternatives to accommodate growth.

Table 3.12-6

Salinas City Elementary School District, 2003-2004

Name	Location	Capacity	Enrollment
Boronda	1114 Fontes Lane	600	472
El Gabilan	1256 Linwood Drive	714	731
Kammann	521 Rochex Street	822	980
Laurel Wood	645 Larkin Street	594	565
Lincoln	705 California Street	579	510
Loma Vista	757 Sausal Drive	564	571
Los Padres	1130 John Street	450	726
Mission Park	403 W. Acacia Street	714	726
Monterey Park	410 San Miguel Avenue	609	530
Natividad	1465 Modoc Avenue	849	799
Roosevelt	120 Capitol Street	633	491
Sherwood	110 S. Wood Street	1,137	1,133
University	833 W. Acacia Street	471	598
Baldwin Park Community	1127 Baldwin Street	20	12
Total		8,756	8,844

Source: Salinas City Elementary School District (www.greatschools.net), June 2005.

Santa Rita School District

The Santa Rita School District serves most of North Salinas and is the City's only K-8 district with the following schools (see Table 3.12-7): Santa Rita (K-5), La Joya (K-5), McKinnon Elementary (K-5), and Gavilan View (6-8). A new high school, Santa Rita High School (9-12), middle school, Bolsa Knolls (6-8), and elementary school, New Republic (K-5), are being constructed in the district.

Table 3.12-7

Santa Rita Union School District, 2003-2004

Name	Location	Capacity	Enrollment
Santa Rita Elementary (K-5)	2014 Santa Rita Street	600	647
La Joya Elementary (K-5)	55 Rogge Road	500	692
New Republic (K-5)	Arcadia & Emerald	500	--
McKinnon Elementary (K-5)	2100 McKinnon Street	550	584
Elementary Total		2,150	2,190
Bolsa Knolls Middle (6-8)	50 Rogge Road	500	--
Gavilan View Middle (6-8)	18250 Van Buren Avenue	550	1,148
Middle School Total		1,050	1,148
Santa Rita High (9-12)		1,100	--
Total		4,300	4,385

Source: Santa Rita Union School District
(www.greatschools.net), June 2005.

Salinas Union High School District

The District operates four middle schools (7-8) and five high schools (9-12) that service the entire City, except for the Santa Rita District (see Table 3.12-8, below). Planned improvements include expansion of Alisal High School and renovation of Salinas High School.

Colleges and Universities

Hartnell College is part of the California Community College system, and offers two-year Associate Degrees and certificates. There are no four-year colleges located within the project area. The closest facilities are California State University Monterey Bay (Fort Ord), Golden Gate University-Monterey Campus, Monterey Peninsula College, Monterey Institute of International Studies, the University of California Santa Cruz, and the Monterey Bay Education, Science, and Technology Center of UC Santa Cruz.

Table 3.12-8

Salinas Union High School District, 2003-2004

Name	Location	Capacity	Enrollment
El Sausal Middle School	1155 E. Alisal Street, Salinas	1,323	875
La Paz Middle School	1300 N. Sanborn Road, Salinas	972	1,073
Harden Middle School	1561 McKinnon Drive, Salinas	1,220	1,110
Washington Middle School	560 Iverson Street, Salinas	1,386	1,293
Middle School Total		4,901	4,351
Alisal High School	777 Williams Road, Salinas	2,160	2,177
North Salinas High School	55 Kip Drive, Salinas	2,079	2,001
Everett Alvarez High School	1900 Independence Blvd., Salinas	2,160	2,188
Salinas High School	726 S. Main Street, Salinas	2,322	2,617
Mt. Toro Continuation High	10 Sherwood Place, Salinas	297	325
High School Total		9,018	9,308
Total		13,919	13,659

Source: Salinas Union High School District (www.greatschools.net), June 2005.

Open Space and Parks

Monterey County - Pajaro and Castroville

The Monterey County Parks Department maintains seven county and regional park facilities providing quality recreational facilities. These facilities include:

- Royal Oak Park
- Manzanita Park
- Toro County Park
- Laguna Seca Recreation Area
- Jacks Peak County Park
- San Lorenzo Regional Park
- Lake San Antonio

A summary of these facilities is presented below.

Royal Oaks Park - 537 Maher Road, Watsonville, CA 95076 - Royal Oaks Park was established in 1966 and offers a 122-acre day use facility set in a small valley studded with Coast Live Oaks. The park facilities include a softball field, playground equipment, basketball, volleyball, tennis courts, and miles of hiking trails.

Manzanita Regional Park - 17100 Castroville Boulevard, Salinas (near Prunedale) is mainly for Little League, AYSO soccer and other youth sport activities.

Toro County Park - 501 Monterey-Salinas Highway 68, Salinas, CA 93908 - The park facilities include an equestrian staging area and riding trails, two softball fields, playgrounds, horseshoe pits, mountain biking, volleyball courts, and over 20 miles of riding and hiking trails.

Laguna Seca Recreation Area - 1025 Monterey Highway 68, Salinas, CA 93908 - Laguna Seca Recreation Area of Monterey County is home of the *Mazda Raceway at Laguna Seca* and the *Laguna Seca Recreation Area*. Recreational vehicle (RV) and tent camping at Laguna Seca Recreation Area has easy access to both the Monterey Peninsula and the Salinas Valley. Laguna Seca Recreation Area has large group meeting facilities and picnic areas, as well as an Off-Highway Vehicle track and Rifle and Pistol Range.

Jacks Peak County Park - 25020 Jacks Peak Park Road, Monterey, CA 93940 - Jacks Peak Park offers visitors views from trails that wind through skyscraping Monterey Pine forests.

San Lorenzo Park - 1160 Broadway, King City, CA 93930 - San Lorenzo Park offers day-use facilities, which include picnic areas, a gazebo, playgrounds, horseshoe pits, volleyball courts, softball areas, and a walking trail along the banks of the Salinas River. San Lorenzo Park has over 90 campsites available, and has large group picnic areas and meeting facilities.

Lake San Antonio - 2610 San Antonio Road, Bradley, CA 93426 - Lake San Antonio is a freshwater recreation area. Lake San Antonio's 5,000-surface acres of water and 60 miles of shoreline provide year-round activities including picnicking, camping, fishing, hiking, swimming, boating, and water-skiing.

Libraries

Monterey County – Pajaro and Castroville

Monterey County provides library services to residents of the unincorporated county and eight cities through the Monterey County Free Libraries system. The system currently serves an ethnically, culturally, and economically diverse population of approximately 205,000 County residents in a library service area of 3,125 square miles.

Services are provided with 17 branch libraries, and other programs including: books by mail, adult literacy program, two countywide mobile book services, Monterey County Free Library foundation, and a homework center program. Branch libraries are located in Aromas, Big Sur, Bradley, Buena Vista (Las Palmas area), Carmel Valley, Castroville, Gonzales, Greenfield, King City, Marina, Pajaro, Parkfield, Prunedale, San Ardo, San Lucas, Seaside, and Soledad. Of these, the following libraries and services in the project area are shown below:

- Administrative Office: 26 Central Avenue, Salinas
- Community Free Libraries: Buena Vista, 18250 Tara Drive, Salinas
Castroville, 11266 Merritt Street, Castroville
Pajaro, 29 Bishop Street, Pajaro
Prunedale, 17822 Moro Road, Salinas
- Community and Countywide Programs: Adult Literacy Program - 26 Central Ave., Salinas
Books by Mail - 26 Central Ave., Salinas
Bookmobile – North County - 17822 Moro Rd., Salinas
Bookmobile – South County - 402 Broadway Ave., King City
Community Information Program - 26 Central Ave., Salinas
Foundation for MCFL - 339 Pajaro St., Suite C, Salinas
Homework Center Program - 26 Central Ave., Salinas

Funding for the Monterey County Free Libraries comes primarily from its share of property taxes collected within the library service area, amounting to about one cent per dollar collected. A small percentage of Library revenues originates from other sources, including the County General Fund, the State of California, library fees and fines, and donations.

City of Salinas

The Salinas Public Library serves residents of the City and surrounding areas with three facilities:

- El Gabilan Library (North Salinas)
- Cesar Chavez Library (East Salinas)
- John Steinbeck Library (South Salinas)

The City of Salinas uses the California State Library recommended standard of 0.5 square feet of library space per capita to determine if community needs for library services are being met.

Utilities and Service Systems

Water Service

Monterey County – Pajaro and Castroville

Water supply in North County is derived entirely from ground water sources. The water basins in North County include the Pajaro River water basin and the northeastern end of the Salinas River water basin. The boundary of the two basins reflects jurisdictional boundaries: the Pajaro basin is administered by the Pajaro Valley Water Management District, while the Salinas River Valley is managed by the Monterey County Water Management Agency. Water service in Pajaro is provided by the Pajaro/Sunny Mesa Community Services District. Castroville is served by the Castroville Water District.

Salinas

California Water Service Corporation (Cal Water) and Alco Water Service (Alco) provide water to the City of Salinas. Alco serves approximately one-third of the City. The area is primarily in the east and southeast portions of the City. Cal Water services the majority of the urbanized planning area including: Vista Del Oro, Las Palmas, Toro Park, Oak Hills, Bolsa Knolls, and Las Lomas.

The source of all urban and agricultural water for Salinas is groundwater. Water supplies for the planning area are limited to the watershed since no imported water sources are available.

Wastewater Service

Monterey County – Pajaro

Wastewater service in Pajaro is provided by the Pajaro/Sunny Mesa Community Services District, which has a contract with the City of Watsonville for treatment of wastewater.

Castroville and Salinas

Castroville, Salinas and surrounding areas are served by the Monterey Regional Water Pollution Control Agency (MRWPCA), which provides regional wastewater conveyance, treatment, disposal, and recycling services to all of the sewered portions of northern Monterey County. MRWPCA member communities are Pacific Grove, Monterey, Del Rey Oaks, Seaside, Sand City, Fort Ord, Marina, Castroville, Moss Landing, Boronda, Salinas and some unincorporated areas in northern Monterey County.

Wastewater treatment for the planning area is provided by MRWPCA's Regional Wastewater Treatment Plant located two miles north of Marina. The Regional Wastewater Treatment Plant is a secondary level plant using the Trickling Filters-

Solids Process. The plant is rated at 29.6 mgd and current flows are about 21 mgd.

MRWPCA maintains 25 pump stations connected to the treatment plant. The Salinas area is served by the Salinas Pump Station and Salinas Interceptor. Both facilities are designed for Average Daily Wastewater Flow (ADWF) of about 12 million gallons per day (mgd) and Peak Waste Water Flow (PWWF) of about 29 mgd. Currently, ADWF from Salinas is about 12 mgd. PWWFs have occasionally exceeded 29 mgd, resulting in a backup in the City's system.

Recycling is provided by the MRWPCA's Salinas Valley Reclamation Plant, a 29.6 mgd plant that uses mixed media gravity filters preceded by coagulation/flocculation, and followed by chlorine disinfection. These treatment levels meet Title 22 standards for disinfected tertiary water, and the water is currently used for unrestricted irrigation of food crops. Additionally, MRWPCA manages the recycled water distribution system under contract from the Monterey County Water Resources Agency. The recycling operations provide irrigation water to 12,000 acres of Castroville farmland.

Solid Waste

Monterey County – Pajaro and City of Salinas

Solid waste generated by the project would be collected by Salinas Valley Solid Waste Authority (SVSWA), a joint powers agency made up of the following local governments: Monterey County (eastern half of the unincorporated county, including Pajaro), and the cities of Gonzales, Greenfield, King City, Salinas, and Soledad.

The Authority is responsible for providing secure long-term solid waste disposal service to all its members in an environmentally sound and cost-effective manner. To accomplish this goal, the Authority currently owns four landfills and oversees the contract operation of these facilities. The Authority is also responsible for overseeing future landfill siting or expansion to meet the area's long-term solid waste disposal needs.

Existing facilities are located at Crazy Horse, Johnson Canyon, and Jolon Road; there are transfer stations in Salinas and King City. The 250,000 residents of the Salinas Valley produce 900 tons of garbage per day. Depending on a few variables, existing landfills will be filled within 5 to 50 years. The Waste Authority is embarking on a plan to guarantee the Salinas Valley space for its garbage for the next 70 years.

Monterey County – Castroville

Monterey Regional Waste Management District (District) jurisdictional boundaries include the cities of Carmel-by-the-Sea, Del Rey Oaks, Marina, Monterey, Pacific Grove, Sand City, Seaside, and the unincorporated areas of Big

Sur, Carmel Highlands, Carmel Valley, Castroville, Corral De Tierra, Laguna Seca, Moss Landing, Pebble Beach, San Benancio, and Toro Park. The District covers a total of 853 square miles. The population currently served is about 170,000.

The District's facilities are located on its 475-acre property, 2 miles north of Marina, at the Monterey Regional Environmental Park, 14201 Del Monte Blvd. The property consists of a 315-acre permitted sanitary landfill site, a 126-acre buffer area (mostly Salinas River floodplain), 20 acres for the administration building, scalehouse, resale facility (Last Chance Mercantile), maintenance buildings, landfill gas power project, Materials Recovery Facility (MRF), household hazardous waste facility, and the one-mile site entrance road, Charlie Benson Lane.

The District's primary purpose is to dispose of the Monterey area's solid waste. In recent years, the District's role has expanded to include the recovery of recyclable materials in the waste stream, including cardboard, paper, glass, wood, yard waste, plastics, metals, sheetrock, concrete, asphalt, reusable building materials, and resale items. The District is also the recipient of most of Monterey County's sewage sludge. In addition, the first landfill gas-to-electrical energy system in Central California was installed at the disposal site in 1983. More than 4,000 kW of continuous power is currently being generated. The District also accepts and safely recycles or disposes of household hazardous waste.

In accordance with the District's Landfill Site Master Plan (Vector 8/04), the proposed remaining site waste capacity is approximately 44 million tons, or 67 million cubic yards. If the District continues to achieve the "AB939" State-mandated 50 percent recycling goal, the landfill will continue to serve the present service area through the year 2109.

3.12.3 REGULATORY SETTING

Table 3.12-9 identifies goals, objectives, and policies for public services and utilities, which provide guidance in relation to project activities. The table also indicates which criteria in the Public Services and Utilities Section are responsive to each set of policies. The Monterey County General Plan written in 1982 is currently being updated but it has not yet been ratified by the Planning Commission and Board of Supervisors. Therefore, the 1982 Monterey County General Plan Goals, Policies, and Objectives were used for disclosure.

Table 3.12-9				
General Plan Goals, Objectives and Policies Public Services, Utilities, and Service Systems				
Adopted Plan Document	Document Section	Document Reference	Policy	Relevant Evaluation Criteria
Monterey County 1982 General Plan	Environmental Constraints: Emergency Preparedness:	Goal 17 Fire hazards	Policy 17.3 New development policies regarding siting to coincide with Fire Department response times; water availability	1, 2
	County Development: Public Services and Facilities	Goal 46 Emergency services	Policies and Objectives 46.1 and 46.2	1, 2
		Goal PS-1 Public facilities and services	Policy PS-1.1 Facilities and services required for all new development Policy PS-1.3 Cost sharing	1, 2
City of Salinas 2002 General Plan	Land Use Element, Public Facilities and Services	Goal LU-4 Fire protection, emergency services, and code compliance	Policy LU-4.2 New development and enforcement of zoning and building codes.	1, 2, 3
		Goal LU-5 Police protection	Policy LU-5 Provide adequate police protection levels.	1, 2
		Goal COS-7 Parks, recreational facilities and services	Policy COS-7.8 Ensure adequate supply and maintenance of public parks	1, 2, 3
		Goal LU-9 Schools	Policy LU-9.1 New school siting Policy LU-9.2 Impacts	1, 2, 3
	Libraries	Goal LU-10 Libraries	Policy LU-10-.1 Provide services and facilities Policy LU-10.3 Expansion Policy	1, 2, 3

Source: Parsons, 2005.

3.12.4 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The following significance criteria were used to evaluate the impacts to public services, utilities, and services systems associated with the proposed Project (Table 3.12-10).

Table 3.12-10

**Evaluation Criteria with Points of Significance
Public Services, Utilities, and Service Systems**

Evaluation Criteria	As Measured by	Point of Significance	Justification
1. Will the Project increase demand for police, fire, water, wastewater treatment and disposal or solid waste removal to such a degree that accepted service standards are not maintained?	Ratio of service personnel or facilities to population.	Greater than 0 change in the ratio.	City of Salinas General Plan Monterey County General Plan Monterey County Ordinance No. 4083 (discretionary North County development moratorium to conserve water)
2. Will Project construction disrupt police, fire, water, wastewater treatment and disposal, or solid waste removal to such a degree that accepted service standards are not maintained?	Change in response times or distance away from project construction.	Greater than 0 change in the response time, or within 500 feet of construction.	City of Salinas General Plan Monterey County General Plan
3. Will the project construction and/or permanent operation result in greater demand for school, library, and park facilities and services?	Increased school enrollment. Greater usage of library services. The ratio of park and recreational land to population.	Exceeds capacity Any increase in population Exceeding ratio of park land to population: County Increase in population Salinas: 3 acres of developed parkland per 1,000 residents	City of Salinas General Plan Monterey County General Plan

Source: Parsons 2005.

3.12.5 METHODOLOGY

The impact analysis is based on a review of relevant literature and technical reports concerning the project area. Both the Monterey County General Plan (1982), and relevant Ordinances; and Salinas General Plan (2002) were used to justify the application of points of significance of the project on the environment. Even though the project was studied in the context of the 21st Monterey County General Plan Update, that document was not used to justify the application of the points of significance, since the update has not yet been ratified by the Planning Commission and Monterey County Board of Supervisors.

3.12.6 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION MEASURES

Impact: PSU-1: Will the Project increase demand for police, fire, water, wastewater treatment and disposal, or solid waste removal to such a degree that accepted service standards are not maintained?

Fire Protection:

Analysis: *Less than Significant, LPA and Alternate Castroville Passenger Platform Site*

Neither the LPA nor alternate Castroville site would change the ratio of service personnel or facilities to population. Construction of proposed stations and platforms would not directly result in population increases. The Castroville LPA (Site #2) Preliminary site plans include a pedestrian/bicycle undercrossing of the Union Pacific Railroad Coast Line track at the station. The undercrossing and its approaches would be designed to accommodate fire protection vehicular equipment as an emergency alternative route to SR 156. Therefore, impacts to fire protection services would be less than significant.

Mitigation: No mitigation is necessary.

Police Protection:

Analysis: *Less than Significant, LPA and Alternate Castroville Passenger Platform Site*

Neither the LPA nor alternate Castroville site would change the ratio of service personnel or facilities to population. Construction of proposed stations and platforms would not directly result in population increases. All three LPA sites would add pedestrian and vehicular activity to areas which currently have little or no pedestrian and vehicle activity. Some additional surveillance of the station areas by police patrols is anticipated. The proposed platforms and station would all be monitored by closed

circuit television surveillance as is common practice for all new Caltrain stations. Therefore, impacts to police protection services would be less than significant.

Mitigation: No mitigation is necessary.

Domestic Water:

Analysis: *Less than Significant, LPA and Alternate Castroville Passenger Platform Site*

No significant impacts on water supplies would result from the Project in either alternative because a minimal water supply would be needed to operate the Project. The platform and station sites would all have drinking fountains, thus a minor increase in water usage will occur. Additionally, the Salinas station will have a water fountain feature that would incorporate the cycling of water contained within the fountain. All project sites will have landscaping that would include the planting of drought-tolerant native plants. Offsetting these water uses, the Castroville Passenger Platform at Site #2 may remove approximately 9 acres from agricultural production at the locally preferred site, thereby reducing water consumption overall. Therefore, impacts to water supply would be less than significant.

Mitigation: No mitigation is necessary.

Wastewater:

Analysis: *Less than Significant, LPA and Alternate Castroville Passenger Platform Site*

No significant impacts on wastewater systems would result from the Project in either alternative because only a minimal wastewater facility would be needed to operate the Project, such as restroom facilities. Therefore, impacts to the wastewater system would be less than significant.

Mitigation: No mitigation is necessary.

Solid Waste:

Analysis: *Less than Significant, LPA and Alternate Castroville Passenger Platform Site*

No significant impacts on landfills would result from operation of the Project in either alternative because the project does not directly increase the population of the area. Construction of the proposed project for either alternative would generate construction debris. However, compliance with state, regional, and local waste hauling regulations and implementation of best management practices during construction would not result in significant solid waste disposal impacts. Therefore, impacts to solid waste capacity would be less than significant.

Mitigation: No mitigation is necessary.

Impact PSU-2: Will project construction disrupt police, fire, water, wastewater treatment and disposal, or solid waste removal to such a degree that accepted service standards are not maintained?

Analysis: *Less than Significant, LPA and Alternate Castroville Passenger Platform Site*

Construction at the project and alternate site would not disrupt public services to such a degree that accepted service standards are not maintained. All construction impacts would be temporary. The applicant would obtain all necessary transportation permits from the appropriate city, county, and/or state agencies and follow standard traffic control procedures as dictated by those agencies.

Construction of the proposed project for both alternatives would not occur within 500 feet of a fire or police station. Therefore, fire and police department activities would not be impeded or require relocation during construction. None of the alternatives would physically alter existing fire or police facilities or require the construction of new facilities. Construction activities would also have no direct impact on emergency response times for fire or police services as no roadways would require closure (temporary construction impacts caused by traffic lane closures are addressed in Section 3.14, Transportation).

Although construction of the proposed project could occur within 500 feet of a water or wastewater service system, construction would be managed in such a way as to avoid interrupting service.

With acquisition of permits and operation in accordance with the provisions dictated by the permitting agencies, this impact is considered less than significant.

Mitigation: No mitigation is necessary.

Schools, Libraries, and Park Facilities and Services:

Impact PSU-3: Will the project construction and/or permanent operation result in greater demand for school, library, and park facilities and services?

Analysis: *Less than Significant, LPA and Alternate Castroville Passenger Platform Site*

The project and alternate site would not disrupt school and/or library services to such a degree that accepted service standards are not maintained. Project sites are not adjacent to schools, libraries or parks, so construction is not expected to disrupt these facilities. The project would not directly generate additional students or increase the population of the area. Therefore, impacts to schools, libraries, and parks would be less than significant.

Mitigation: No mitigation is necessary.

3.12.7 CUMULATIVE IMPACTS

IMPACT: PSU-C1: Will the project have significant cumulative impacts to public services and utility resources?

Each of the project alternatives could have a growth-inducing affect on population in communities serviced by the proposed platforms and station, which could create significant impacts on public services and utilities. These impacts are discussed further in Section 4.4, Growth Inducement.

3.12.8 CONCLUSION

Implementation of the proposed project and alternatives would not result in significant impacts to public services or utilities in the project areas.

3.12.9 REFERENCES

Alisal Union School District, 2005. Enrollment data via www.greatschools.net. June.

City of Salina, 2002. Salinas General Plan Environmental Impact Report. June.

County of Monterey, 2002. General Plan Environmental Impact Report. March.

Monterey County. 1982a. *Monterey County General Plan*, adopted by the Board of Supervisors, September 30.

Monterey County Sheriff's Department website, June, 2005
(<http://www.co.monterey.ca.us/sheriff/patrol.htm>)

North Monterey County Unified School District, 2005. Enrollment data via www.greatschools.net. June.

Salinas City Elementary School District, 2005. Enrollment data via www.greatschools.net. June.

Salinas Union High School District, 2005. Enrollment data via www.greatschools.net. June.

Santa Rita Union School District, 2005. Enrollment data via www.greatschools.net. June.

3.13 PARKS AND RECREATION

3.13.1 INTRODUCTION AND SUMMARY OF IMPACTS

This section addresses potential impacts to parkland and recreation facilities that would result from development of the proposed project. Substantial reduction in recreational facilities and/or parkland or an increase in demand for additional recreational facilities and/or parkland may result in adverse impacts to established communities. This section analyzes potential impacts to parkland and recreational facilities that could result from the proposed construction and operation of the Caltrain Extension to Monterey County Passenger Rail Stations Project.

A summary of parks and recreation impacts and mitigation measures is presented below. Full analyses of the impacts are included in Section 3.13.6.

<i>IMPACT</i>	<i>SIGNIFICANCE BEFORE MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>SIGNIFICANCE AFTER MITIGATION</i>
PR-1: Would the project increase the use of existing recreational facilities, including neighborhood and regional parks, such that substantial physical deterioration of the existing facilities would occur or be accelerated?	Less than significant	No mitigation is necessary.	Less than significant
PR-2: Would the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	No impact	No mitigation is necessary.	No impact
PR-3: Would the project preclude or substantially limit the use of existing park and recreational facilities by the general public?	Potentially significant	PR-3: Prepare a Traffic Management Plan.	Less than significant
PR-C-1: Would the proposed project result in cumulative impacts to parkland and recreation?	Less than significant	No mitigation is necessary.	Less than significant

3.13.2 ENVIRONMENTAL SETTING

Parkland and associated recreational facilities in the project area are public resources provided by Monterey County, the City of Salinas, the California State Park and National Park Systems,

and the Bureau of Land Management (BLM). Many recreation facilities in the County are privately owned and maintained (including some golf courses, campgrounds, horse stables and sports/aquatic centers). The City of Salinas is primarily responsible for providing and maintaining parkland and associated recreation facilities near the proposed Salinas Facility Site #2, while Monterey County primarily provides and maintains parkland and associated recreation services for the unincorporated communities of Pajaro and Castroville where proposed Pajaro Passenger Platform Site #1 and Castroville Station Sites #1 and #2 are located.

Almost 14 percent of County land (approximately 293,781 acres) is park and recreation facilities that are maintained by various governmental entities (Monterey County, 1982). Eight County Regional Parks comprise the County parks system, which comprise approximately 10 percent of the County's overall park acreage (Monterey County, 1982). These parks are managed by the County Parks and Recreation Department. There are three state parks in the North County area, a planning area within the County where the proposed Pajaro Passenger Platform Site #1 and Castroville Platform Sites #1 and #2 are located. These parks comprise 371 acres of parkland. Many of the County's local parks are provided for through special districts. The Castroville Public Recreation District operates four facilities in the Castroville community that total 5.1 acres. The Pajaro Community Services District maintains a small 0.25-acre playground in the Pajaro community.

The City of Salinas owns and maintains 12 parks (approximately 38.6 acres) and one recreation center in the south area of the City, where the proposed Salinas ITC expansion and Layover Facility Site #2 are located. The privately owned Exposition/PGE Grounds, open for public use, are also located in this area. The City has identified a shortfall in parkland and recreation facilities in comparison to the National Park Standards (City of Salinas, 2002).

No state, national, or BLM managed parks are located within the vicinity of any of the proposed station locations.

Pajaro Passenger Platform Site #1 (Watsonville Junction)

The Pajaro Station site is a disturbed, vacant parcel located along the UPRR corridor in a primarily agricultural setting. No parkland, trails, or other recreation facilities are located onsite, or in the immediate vicinity. There are no bicycle lanes, paths, or routes along Salinas Road, or any other roads within the immediate vicinity of the proposed station site.

Castroville Platform Site #1 (Del Monte Avenue)

Castroville Platform Site #1 is located in a developed, industrial setting that does not support parkland or any recreational facilities in the area. There are no recreational trails, bike lanes or routes in the immediate site vicinity, although Highway 183 and Highway 156 are Caltrans designated bike routes (Monterey County RDA, 2004). However, it has been observed that the Highway 156 overcrossing of the UPRR tracks does not currently have striped bike lanes.

Castroville Platform Site #2 (North of State Route 156)

Castroville Platform Site #2 is located in a predominantly agricultural setting north of State Route 156, near the intersection of Castroville Boulevard and State Route 156. This site is active agricultural land through which the UPRR traverses. There are no recreational facilities or parkland onsite, or in the site vicinity. The portion of State Highway 156 adjacent to the site is the beginning of a stretch of this highway that is designated a State Scenic Highway. This stretch of State Highway 156 supports considerable tourist traffic. Highway 156 as well as Highway 183 are Caltrans designated bike routes (Monterey County RDA, 2004). However, it has been observed that the Highway 156 overcrossing of the UPRR tracks does not currently have striped bike lanes.

A Class I bike facility (separate path) exists and runs parallel to Highway 1 between the end of Haro Street and the Highway 1/Molera Road interchange to the south of Castroville. This bike trail connects with the Pacific Coast Bike Route on Nashua Road. The Pacific Coast Bike Route extends north to Santa Cruz and beyond, and extends south to Highway 1 in Big Sur and beyond. Haro Street has a Class III bikeway, that is a street with signage for bike travel (Monterey County RDA, 2004).

Salinas Intermodal Transportation Center and Layover Facility

Salinas Intermodal Transportation Center and Layover Facility Site #2

The proposed Configurations #17 and #18 for the Salinas Intermodal Transportation Center and Layover Facility would be located on a site adjacent to historic Oldtown Salinas, at the head of Main Street. Oldtown Salinas is an area of substantially high pedestrian traffic within the City of Salinas, and is the location of several community events throughout the year. The historic First Mayor's (Harvey-Baker) House, a local tourist attraction, is located in the northeast corner of the site. There is also a historic Southern Pacific locomotive and caboose and single-story Railroad Express Agency building located onsite that are lesser, local tourist attractions. A major tourist destination, the National Steinbeck Center, is located across from the site, on the southeast corner of Main and Market Streets. The National Steinbeck Center draws tourists from around the globe, and at the same time is a focal point for activities in education, history and the arts within the local community. There are many special events of local and regional significance held at the National Steinbeck Center. Bataan Memorial Park, a 2-acre City park, is located adjacent to the site to the east, at the northeast corner of Main and Market Streets. There are no planned parks in the vicinity of the site (City of Salinas, 2002).

3.13.3 REGULATORY SETTING

Monterey County General Plan

Monterey County's government is responsible for regulating land use in the unincorporated areas of the County, including the communities of Pajaro and Castroville. The current General Plan

was fully updated in 1982, and contains the following fundamental land use goals and respective policies relevant to the proposed project, that are intended to preserve, enhance, and plan for additional parkland and recreation facilities within the County:

General Land Use Goal 51

To provide recreational opportunities, preserve natural scenic resources and significant wildlife habitats, and significant historic resources by establishing a comprehensive County Regional Parks and Trails System.

General Land Use Policy 51.1.1

Parks planning shall occur in accordance with the County General Plan. Proposed park development shall be evaluated for short- and long-term impacts on land use, natural resources, circulation, noise, and overall county growth patterns. Impact evaluation shall consider tourist attendance at park sites.

General Land Use Policy 51.2.2

County parks should be developed and distributed equitably, where feasible, in terms of population, geographic location, and recreation needs.

General Land Use Policy 51.3.2

The County Parks Department, in striving for economic self-sufficiency of the overall parks system, shall continue to place a high priority on meeting the recreation needs of county residents.

Monterey County Community General Plan

The Monterey County Community General Plan was developed in January 2005 by eight citizen sponsoring groups, and is under review by the Monterey County Supervisors for adoption. A summary of relevant goals and policies in the Community General Plan intended to protect, enhance, and increase parkland and recreation facilities within the County is provided below:

Guiding Objective #3

Preserve a distinction between urban and rural areas. Channel new growth to areas already committed to an urban level of development (e.g. cities, areas directly adjacent to cities, and densely developed unincorporated communities). Preserve rural areas for resource-based industries (e.g., farming, livestock grazing, and mining), natural resource protection, and open space recreation.

Land Use Goal #5

Preserve Rural Lands for rural residential uses on existing legal lots of record, small-scale farming and grazing, natural resources and watershed protection, passive recreation, existing small-scale neighborhood serving communities and existing industrial uses.

North County Area Plan

The North County Area Plan is an area land use plan that is part of the Monterey County General Plan. The proposed Castroville and Pajaro Valley station locations are under jurisdiction of the Monterey North County Area Plan. The following policy supplemental to the Monterey County General Plan regarding recreation is included as part of the North County Area Plan:

Supplemental Policy 51.1.5 Recreational Trails

The dedication of recreational trail easements shall be encouraged where appropriate for establishing a planned North County Trails System, or where an established trail is jeopardized by impending development or subdivision activity.

North County Land Use Plan and Local Coastal Program

Properties in northern Monterey County within the coastal zone governed by the California Coastal Commission (CCC) are subject to the North County Land Use Plan (LUP). The LUP, one of four segments of the Monterey County Local Coastal Program (LCP), was certified by the CCC in June 1982. There have been several amendments to the LCP by the CCC since that time. The LCP is accompanied by the Monterey County Coastal Implementation Plan (Monterey County, 1988). One of the sites of the proposed project, the proposed Castroville Passenger Rail Platform and parking area at Site 2, is within the coastal zone covered by the LUP, and will be subjected to an analysis of conformity with the LCP.

Goal CZ-3 - Coastal Public Access

Provide a system of access ways and trails to the shoreline and other coastal destinations, consistent with the California Coastal Act.

Policy CZ-3.21 Trail Siting

Trails shall be sited out of the public viewshed and shall blend with the surrounding environment and natural terrain features, wherever possible. The location of the trailheads, however, shall be apparent to the public and situated to facilitate supervision. Trails shall also be located in areas able to sustain public use without damage to natural resources or other conflicts. Therefore, new and existing trails shall be sited or rerouted to avoid safety hazards, sensitive habitats, and incompatible land uses.

NCC Policy LU-5 Recreational Uses

The provision of recreational opportunities and facilities shall be compatible with the preservation of the natural resources of the coast. Low to moderate intensity outdoor recreational use shall be emphasized within the State beaches and wildlife refuges. Higher intensity use shall be emphasized in Moss Landing and inland recreation areas.

NCC Policy C-6 Trails System

To provide public access to and along the shoreline and to enhance general recreational opportunities, a system of trails shall be established as shown on Map NCC-3. This system shall include the existing Bicentennial Bike Route, trails proposed in the County's Recreational Trails Plan, and the use of public tidelands, recreational areas and roads, and easements across private properties, pursuant to the coastal-wide trail Policies CZ-3.20 through CZ-3.24.

Castroville Community Plan

As described in the Circulation Plan of the Draft Castroville Community Plan (Monterey County RDA, 2004), three proposed bicycle projects in the Castroville vicinity are included in the 2001 Monterey County General Bikeways Plan, including a Class I bike trail parallel to Highway 183 between the Salinas City Limits and Highway 1. The proposed bike trail would become a vital

connection from Castroville to the Pacific Coast Bike Route on Highway 1. The proposed Elkhorn Bicycle Project, also included in the Bikeways Plan, would create a bicycle facility between Castroville and the Elkhorn Slough. The section along Castroville Boulevard, from Collins Road to Del Monte Farms will be a Class I (separate path) bikeway. The Class I section is fully funded and is in the Preliminary Engineering/Environmental Study stage.

This project includes the construction of a bike path (Class I) along the north side of the existing embankment of the Highway 156 bridge overcrossing at Merritt Street (Highway 183) in Castroville. From Del Monte Farms, the Del Monte Farms/Ormart Road/Elkhorn Road bikeway will be a Class III facility. In addition, Class II (striped lane on streets) bikeways are proposed along Castroville Blvd. between Dolan Road and San Miguel Canyon Road, along Dolan Road between Highway 1 and Castroville Boulevard, and along Elkhorn Road north of the Del Monte Farms/Ormart Road/Elkhorn Road Class III (signage only) bikeway. The 2001 Monterey County General Bikeways Plan also proposes a Class II bikeway on Blackie Road for the entire length from Highway 183 to Highway 101.

The Community Plan references the planned passenger rail (Caltrain) service extension from Gilroy to Salinas and the train station in Castroville (the proposed project of this EA/EIR). As a part of this proposed project, the Community Plan states that a pedestrian/bike facility, including an underpass at the train tracks, will be developed to connect the western portion of the Castroville community with the train station. This will provide the additional benefit of connecting existing and future residential development east of the railroad tracks with the rest of the community. It will also provide a much needed pedestrian/bike connection between the existing community and the North Monterey County High School and planned middle school, both located to the east of Castroville Boulevard. The underpass will also provide a connection between the existing regional bike system that extends through Fort Ord to the west and the proposed bicycle facility along Castroville Boulevard that will continue through Elkhorn Slough to Santa Cruz County to the north and east.

City of Salinas General Plan

The City of Salinas General Plan contains land use goals and development policies intended to preserve parkland and recreation resources within the City. The City has an extensive and integrated pedestrian and bicycle trail network that links major activity centers, parks and recreational facilities, and transit nodes within the City. The City seeks to maintain and improve the biking and walking environment by providing safe and attractive sidewalks, walkways, and bike lanes and paths for both recreational and commuting purposes (City of Salinas, 2002). Goals and policies relevant to the proposed project intended to preserve parkland and recreational resources in the City are provided below:

Goal COS-7

Provide, develop, and maintain ample park and recreational facilities that offer a variety of recreational activities.

Policy COS-7.7

Encourage development of private commercial recreational facilities (e.g., golf courses, sports centers, bowling alleys, family fun centers, etc.) to expand community recreational opportunities and to fill unmet goals.

Policy COS-7.12

Link activity centers, recreational opportunities, transit nodes, and other services to the integrated trails network.

Section 4(f) of the United States Department of Transportation Act of 1966

Section 4(f) of the United States Department of Transportation (DOT) Act of 1966 stipulates that the Federal Highway Administration (FHWA) and other U.S. DOT agencies cannot approve the use of land from a significant publicly owned public park, recreation area, wildlife or waterfowl refuge, or any significant historic site unless the following conditions apply:

- There is no feasible and prudent alternative to the use of land.
- The action includes all possible planning to minimize harm to the property resulting from use.

General Plan Goals, Objectives, and Policies

Table 3.13-1 identifies goals, objectives, and policies that provide guidance for development in the project areas in relation to parkland and recreation. The table also indicates which criteria in the Parkland and Recreation Section are responsive to each set of policies.

Table 3.13-1

General Plan Goals, Objectives, and Policies
Parks and Recreation

Adopted Plan Document	Document Section	Document Reference	Policy	Relevant Evaluation Criteria
Monterey County 1982 General Plan	General Land Use	Goal 51, Provide recreational opportunities with County Regional Parks and Trails System.	<p>Policy 51.1.1, Parks planning shall occur in accordance with the County General Plan. Impact evaluation shall consider tourist attendance at park sites</p> <p>Policy 51.2.2, County parks should be developed and distributed equitably</p> <p>Policy 51.3.2, Meet recreation needs of county residents</p>	1, 2, 3

Table 3.13-1

General Plan Goals, Objectives, and Policies
Parks and Recreation

Adopted Plan Document	Document Section	Document Reference	Policy	Relevant Evaluation Criteria
Monterey County 2005 Community General Plan	Land Use	Guiding Objective #3 Preserve distinction between urban and rural areas	Goal #5 Preserve Rural Lands for passive recreation	1, 2, 3
Salinas 2002 General Plan	Parks and Recreation Facilities	Goal COS-7 Parks, recreational facilities and services	Policy COS-7.8 Ensure adequate supply and maintenance of public parks Policy COS-7.7, Encourage development of private commercial recreational facilities Policy COS-7.12, Link activity centers, recreational opportunities, transit nodes, and other services to the integrated trails network	1, 2, 3

Source: Parsons, 2005.

3.13.4 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The evaluation criteria for evaluating impacts to parkland and recreation are presented in Table 3.13-2. This criterion is based primarily on the model initial study checklist in Appendix G of the State CEQA Guidelines, and is also drawn from the Monterey County and City of Salinas General Plans, in addition to Section 4(f) of the U.S. DOT Act of 1966.

Table 3.13-2

**Evaluation Criteria with Point of Significance
Parks and Recreation**

Evaluation Criteria	As Measured by	Point of Significance	Justification
1. Increase the use of existing recreational facilities, including neighborhood and regional parks, such that substantial physical deterioration of the existing facilities would occur or be accelerated.	a. physical deterioration of existing recreation facilities b. physical erosion, degradation, damage of existing parkland and associated natural features.	Any accelerated physical deterioration, degradation or damage to existing parkland and associated natural features.	Monterey County General Plan City of Salinas General Plan CEQA Appendix G Section 4(f) regulations of the U.S. Department of Transportation (USDOT) Act of 1966.
2. Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.	a. all other resource impact areas requiring analysis under NEPA and CEQA	Any significant, adverse impact as described under NEPA and CEQA.	Monterey County General Plan City of Salinas General Plan CEQA Appendix G Section 4(f) regulations of the U.S. Department of Transportation (USDOT) Act of 1966.
3. Preclude or substantially limit the use of existing park and recreational facilities by the general public	a. obstruction or limitation of access to existing park or recreation facilities, (including but not limited to physical obstruction, limited parking, reduced hours of operation)	Any physical obstruction or policy that would limit accessibility and use of parkland and recreational facilities.	Monterey County General Plan City of Salinas General Plan CEQA Appendix G Section 4(f) regulations of the U.S. Department of Transportation (USDOT) Act of 1966.

Source: Parsons, 2005.

3.13.5 METHODOLOGY

Impacts to parkland and recreation are generally assessed by anticipating and estimating potential accelerated physical deterioration, degradation or damage to existing parkland and associated natural features, and to recreational facilities that could result from a project. In addition, any physical obstruction or policy that would limit accessibility and use of parkland and recreational facilities is identified and evaluated.

The baseline conditions were assessed based on a site visit, review of planning maps, and photos of proposed station sites (Parsons, 2005).

3.13.6 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION MEASURES

IMPACT: **PR-1: Would the project increase the use of existing recreational facilities, including neighborhood and regional parks, such that substantial physical deterioration of the existing facilities would occur or be accelerated?**

Analysis: *Less Than Significant, LPA and Alternate Castroville Passenger Platform Site*

None of the proposed station locations currently support parkland or recreational facilities. No parkland or recreational facilities are located within the vicinity of the Pajaro Platform site and Castroville Platform Sites #1 and #2. The Salinas ITC expansion serves to support adjacent recreational uses by providing a transportation node and weekend (Saturday and Sunday) supplementary parking for Bataan Memorial Park, the National Steinbeck Center, Harvey-Baker House, and other historic features onsite, as well as the overall Oldtown Salinas district that serves as a cultural community focal point. Both the LPA and Alternate Castroville Passenger Station Site Alternatives may result in increased use of the mentioned recreational facilities in the vicinity of the Salinas ITC expansion, due to the enhanced accessibility of the location resulting from the proposed project. However, the increased use that would result from the proposed project is not anticipated to exceed the projected usage planned for these facilities, and would not be so great as to result in significant, accelerated physical deterioration of existing facilities. No adverse impacts to other parks or recreational facilities are anticipated.

In Castroville, a grade separated pedestrian and bicycle crossing under the Union Pacific Railroad tracks is proposed as part of the project at Castroville Platform Site No. 2.

This undercrossing would be developed to connect the western portion of the Castroville community with the train station, and would provide the additional benefit of connecting existing and future residential development east of the railroad tracks with the rest of the community. It would also provide a much needed pedestrian/bike connection between the existing community and the North Monterey County High School (at 13990 Castroville Boulevard) and planned middle school, both located to the east of Castroville Boulevard. The underpass would also provide a connection between the existing regional bike system that extends through Fort Ord to the west and the proposed bicycle facility along Castroville Boulevard that would continue through Elkhorn Slough to Santa Cruz County to the north and east.

While the project would construct a grade separated pedestrian and bicycle trail under the Union Pacific Railroad Coast line track at Castroville Platform Site 2, it would not include any new recreational facilities or expansion of existing recreational facilities; therefore, no significant, adverse impacts are anticipated to result from the proposed project.

Mitigation: No mitigation is required.

IMPACT: **PR-2. Would the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?**

Analysis: *No Impact, LPA and Alternate Castroville Passenger Platform Site*

The increased use of recreational facilities and adjacent parkland at the Salinas ITC expansion that may result from the proposed project would not be great enough to require construction of additional parkland and recreational facilities. Bicycle lockers and racks would be constructed at each proposed station, which would enhance bicycle travel and recreation opportunities in the area. The construction of bicycle facilities in light of the entire proposed stations would not result in adverse environmental effects. The proposed project would not include construction or expansion of recreational facilities that would have an adverse physical affect on the environment.

Mitigation: No mitigation is required.

IMPACT: **PR-3: Would the project preclude or substantially limit the use of existing park and recreational facilities by the general public?**

Analysis: *Potentially Significant Impact, LPA and Alternate Castroville Passenger Platform Site*

None of the proposed station locations currently support parkland or recreational facilities. No parkland or recreational facilities are located within the vicinity of the Pajaro and Castroville Station Sites #1 and #2. No lane or road closures along scenic State Highway 156 would result due to project construction or operation; therefore, heavy tourist traffic along this highway would not be impacted.

The Salinas ITC expansion serves to support adjacent recreational uses, by providing a transportation node and weekend (Saturday and Sunday) supplementary parking for Bataan Memorial Park, the National Steinbeck Center, Harvey-Baker House, and other historic features onsite – as well as the overall Oldtown Salinas district that serves as a cultural community focal point. Operation of the proposed project and Salinas Layover Yard Facility and Intermodal Transportation Center would increase accessibility to adjacent recreational facilities and the larger Oldtown Salinas.

The Salinas ITC expansion will provide an expanded parking supply to accommodate the addition of Caltrain service. Configuration 17 would be developed in two phases. As part of Phase 1, Lincoln Avenue would be extended to allow for the construction of two surface lots containing a total of approximately 300 spaces. This yields a net increase of approximately 150 spaces. Phase 2 would construct a 4-level parking garage containing 700 spaces in the footprint of the Phase 1 surface lot. This design allows for a total parking supply of 700 spaces representing a net increase of approximately 550 parking spaces. Configuration 18, however, would rely exclusively on surface parking. Three surface parking lots would provide 663 spaces.

Therefore, sufficient parking would be provided to support the proposed Salinas Layover Yard Facility and ITC, and no parking that currently supports these adjacent and nearby recreational facilities would be lost. However, during the construction period, the proposed project may result in insufficient parking to support the patrons of the Harvey-Baker House and adjacent historic locomotive and caboose and other onsite historic railroad features. Insufficient parking to support tourists and other visitors would be considered a significant impact to recreational facilities.

Mitigation: **PR-3: Prepare a Traffic Management Plan to Accommodate Parking around the Harvey-Baker House during Project Construction.**

To mitigate impacts to recreation that may result from a loss of onsite parking during the construction period, the TAMC will prepare a Traffic Management Plan (TMP) that will ensure sufficient parking is present throughout the project construction period to support patrons of the Harvey-Baker House and adjacent historic railroad features, and existing Amtrak patrons who may utilize the existing rail service to visit parkland and recreation facilities throughout the County. This mitigation can be accommodated on the site of the expanded ITC by constructing the Phase 1 replacement and expanded (300 space) parking supply in advance of the MST Transfer Center.

After
Mitigation: *Less than Significant*

3.13.7 CUMULATIVE IMPACTS

Impact: **PR-C-1. Would the proposed project result in cumulative impacts to parkland and recreation?**

Analysis: *Less than Significant, LPA and Alternate Castroville Passenger Platform Site*

Construction and operation of the proposed project is not anticipated to result in any cumulative adverse impacts to parkland and recreational facilities. Implementation of Mitigation Measure PR-3 would reduce parking impacts during construction to a less than significant level. Other planned projects in the vicinity of the Salinas ITC expansion would be identified and considered in preparation of the TMP. Therefore, no significant, cumulative impacts to parkland or recreation would result from the proposed project.

Mitigation: No mitigation is required.

3.13.8 CONCLUSION

With implementation of the above-referenced mitigation measures, impacts to parks and recreation resulting from the proposed project would be reduced to less than significant.

3.13.9 REFERENCES

- City of Salinas, 2002. City of Salinas General Plan Conservation/Open Space Element. September.
- Monterey County, 1982. North County Area Plan, a part of the Monterey County General Plan.
- Monterey County, 2004b. North County Coastal Land Use Plan and Local Coastal Plan.
- Monterey County, 2005a. Monterey County Community General Plan. Prepared by Terry Watt for sponsoring citizen groups of Monterey County. January.
- Monterey County Redevelopment Agency (RDA), 2004. *Draft Castroville Community Plan*. December.
- Parsons, 2005. Site visit by Brynna McNulty, Parsons Staff on June 3.
- USDOT, 1966. Section 4(f) regulations of the U.S. Department of Transportation Act of 1966. www.section4f.com. Accessed by Brynna McNulty, Parsons, on July 26, 2005.

3.14 TRAFFIC AND CIRCULATION

3.14.1 INTRODUCTION AND SUMMARY OF IMPACTS

This section describes the potential circulation and traffic impacts associated with roadway, transit, bicycle, and pedestrian systems in the vicinity of the project sites. Mitigation measures are identified to offset any impacts deemed significant. The environmental setting describes the existing transportation system in the vicinity of the project sites and the regulatory setting describes the policies and objectives of adjacent jurisdictions that apply to the project. This analysis is based on the traffic impact analysis prepared for the Monterey County Commuter Rail Stations by Parsons in 2003. The analysis has been updated using the current release of the analysis software (SYNCHRO Version 7.0).

The following items are related to the Traffic and Circulation section, but are evaluated in other sections of this document.

- Potential air quality impacts resulting from traffic are addressed in Air Quality, Section 3.2.
- Potential traffic-related noise impacts are addressed in Noise, Section 3.10.

A summary of traffic and circulation impacts and mitigation measures is presented below. Full analyses of the impacts are included in Section 3.14.7.

<i>IMPACT</i>	<i>SIGNIFICANCE BEFORE MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>SIGNIFICANCE AFTER MITIGATION</i>
TC-1: Will Project cause the 5-year or 10-year (cumulative) no project LOS at an analysis location—to worsen from LOS C or better to LOS D or worse?	Significant	TC-1: Install traffic signal at Salinas Road and Railroad Avenue in Pajaro.	Less than significant
TC-2: Will the Project cause the existing or cumulative no project LOS at an analysis location within the City of Salinas or unincorporated Monterey County to worsen from LOS D or better to LOS E or worse?	Significant	TC-1: Install traffic signal at Salinas Road and Railroad Avenue in Pajaro.	Less than significant

<i>IMPACT</i>	<i>SIGNIFICANCE BEFORE MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>SIGNIFICANCE AFTER MITIGATION</i>
TC-3: Will the Project worsen already (or projected) unacceptable operations at an analysis location?	Significant	TC-3 Install traffic signal at Salinas Road and Railroad Avenue in Pajaro; select Option 18 as the LPA for the Salinas ITC expansion; reroute MST bus routes as needed to avoid congestion at Salinas Road and West Market Street.	Less than significant
TC-4: Will the Project create an inconsistency with policies concerning roadway systems set forth in the General Plans for the City of Salinas and Monterey County?	No impact	No mitigation necessary.	No impact
TC-5: Will the Project create the demand for public transit service above that which is provided, or planned to be provided?	Less than significant	No mitigation necessary.	Less than significant
TC-6: Will the Project disrupt or interfere with existing or planned public transit services or facilities?	No impact	No mitigation necessary.	No impact
TC-7: Will the Project create an inconsistency with policies concerning transit systems set forth in the General Plans for the City of Salinas and Monterey County?	No impact	No mitigation necessary.	No impact
TC-8: Will the Project disrupt or interfere with existing or planned bicycle or pedestrian facilities?	No impact	No mitigation necessary.	No impact
TC-9: Will the Project create an unmet need for bicycle or pedestrian facilities?	Less than significant	No mitigation necessary.	Less than significant
TC-10: Will the Project create an inconsistency with policies related to bicycle or pedestrian systems in the General Plans of the City of Salinas and Monterey County?	No impact	No mitigation necessary.	No impact
TC-C1: Will the Project have the potential to have a cumulative impact on traffic and circulation?	Less than significant	No mitigation necessary.	Less than significant

3.14.2 ENVIRONMENTAL SETTING

Roadway System

The following describes the major roadways in the study area.

Pajaro Valley

Regional access to the proposed commuter rail station is provided via two driveways on Salinas Road. The local roadways included in the traffic analysis are San Juan Road, Railroad Avenue, and Lewis Road. The roadway network serving the site is shown on Figure 3.14-1.

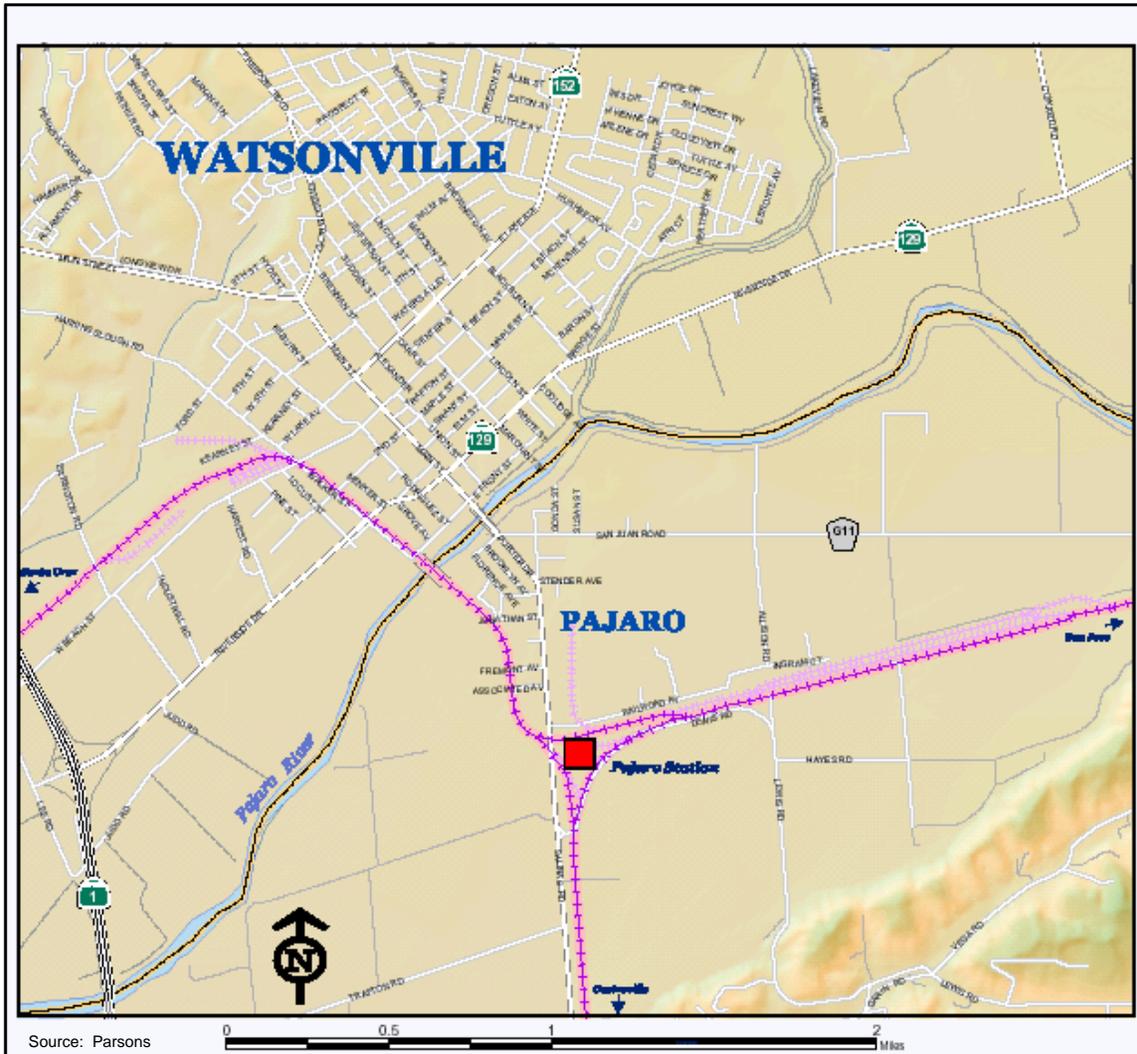
Salinas Road is an arterial roadway oriented generally in a north/south direction. Salinas Road begins at State Highway 1 to the southwest of Pajaro and runs eastward approximately 1½ miles before turning north and becoming County Road G12. Less than one mile north of the project site, Salinas Road turns due north and becomes Porter Drive. At its signalized intersection with San Juan Road, Salinas Road northbound (named Porter Drive at this location) has one exclusive left-turn lane, one through lane, and one shared through/right-turn lane. At this intersection, southbound Salinas Road has two exclusive left-turn lanes, one through lane, and one shared through/right-turn lane. At its unsignalized intersection with Railroad Avenue, Salinas Road has one lane in each direction separated by a two-way-left-turn lane. (Railroad Avenue traffic turning onto Salinas Road is controlled by a stop sign.) At its unsignalized intersection with Lewis Road, Salinas Road has one through lane and one shared through/right-turn lane in the northbound direction and one exclusive left-turn lane and two through lanes in the southbound direction. The northbound and southbound lanes are separated by a median. Lewis Road traffic turning onto Salinas Road is controlled by a stop sign.

San Juan Road (County Road G11) is a two-lane roadway that runs predominantly in an east/west direction. It begins at Porter Drive just north of the project site and runs generally southeast for approximately 10 miles before ending at US Highway 101. At its signalized intersection with Porter Drive (Salinas Road), the westbound leg of San Juan Road has two exclusive right turn lanes and one shared through/left-turn lane. The eastbound leg has one exclusive left-turn lane, one through lane, and one exclusive right-turn lane.

Railroad Avenue is a two-lane roadway that runs in an east/west direction, beginning at Salinas Road and running eastward for approximately one mile before it ends. At its stop-controlled intersection with Salinas Road, the westbound leg of Railroad Avenue has one exclusive left-turn lane and one exclusive right-turn lane.

Lewis Road is a two-lane road that begins at Salinas Road and crosses the UPRR railroad tracks before turning immediately northward to follow the curve of the tracks to the easternmost edge of the Watsonville Junction yard. At that point, Lewis Road turns south and travels approximately three miles before ending at San Miguel Canyon Road. At its

stop-controlled intersection with Salinas Road, Lewis Road has one shared left-turn/right-turn lane.



**Pajaro Valley
Roadway Network**

PARSONS
Figure 3.14-1

Castroville

Regional access to the proposed commuter rail station at Site 2 (the locally preferred alternative) is provided by State Route 156. One local roadway, Castroville Boulevard, is addressed by the traffic impact analysis. The roadway network serving the locally preferred site is shown on Figure 3.14-2.

State Route 156 in the vicinity of the Castroville station site is a two-lane conventional highway east of Castroville Boulevard and a four-lane freeway west of Castroville Boulevard. The west leg of the roadway begins at US Highway 101 and runs west to join with State Highway 1 just west of Castroville. At its signalized intersection with Castroville Boulevard, the eastbound and westbound lanes of SR 156 are divided by a center median. SR 156 westbound has two through lanes and one exclusive right-turn lane, while SR 156 eastbound has one exclusive left-turn lane and one through lane.

Castroville Boulevard is a two-lane arterial roadway that runs roughly east/west between State Route 156 and San Miguel Canyon Road (County Road G12) in Prunedale. In the vicinity of the proposed passenger rail station, a recent realignment of Castroville Boulevard turns sharply to the south to intersect SR 156. The original alignment of Castroville Boulevard becomes unpaved and changes names to Collins Road before dead-ending at the UPRR railroad track. At its signalized intersection with SR 156, Castroville Boulevard has one exclusive left-turn lane and one exclusive right-turn lane.

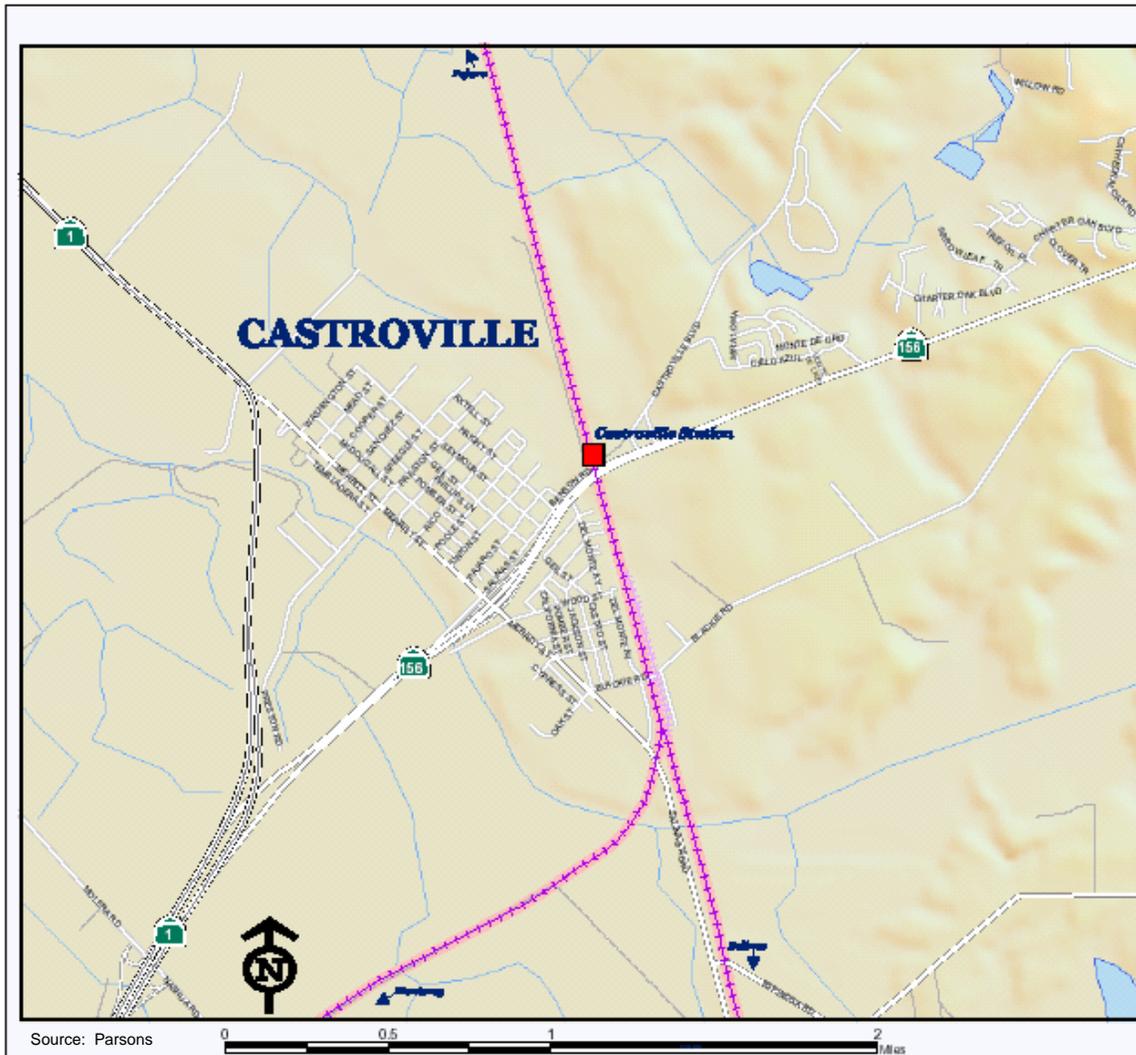
Local access to the proposed commuter rail station at Site 2 will also be afforded by Benson Road. Benson Road is a two-lane local street which connects with the north/south grid of local streets serving the northern portion of Castroville, north of SR 156. Benson Road is currently unpaved between Axtell and Haight Streets, a distance of one block. West of Haight Street, the roadway is named Salinas Street.

Site 1 lies adjacent to Del Monte Avenue and is located approximately one mile south of Site 2. Regional access to Site 2 is provided by State Route 156 and its interchange with Merritt Street (SR 183). Merritt Street is a two-lane arterial roadway that runs roughly north/south and provides all local (Castroville) access to State Route 156.

Local access to a commuter rail station at Site 1 would also be provided by Wood Street and Blackie Road. Wood Street is a two-lane collector street having an unsignalized intersection with Merritt Street, just south of the SR 156/Merritt Street interchange ramps. Site 1 could also be accessed by Blackie Road. In the vicinity of Site 1, Blackie Road is a four-lane arterial street serving the industrial park located both east and west of the Union Pacific Railroad Coast line. Blackie Road has a signalized intersection with Merritt Street.

Salinas

Regional access to the proposed development is provided by North Main Street and West Market Street. Local roadways included in the study area are Station Place, Lincoln Avenue, Palmetto Street, Stone Street, Happ Place, and Capitol Street. The roadway network serving the site is shown in Figure 3.14-3.

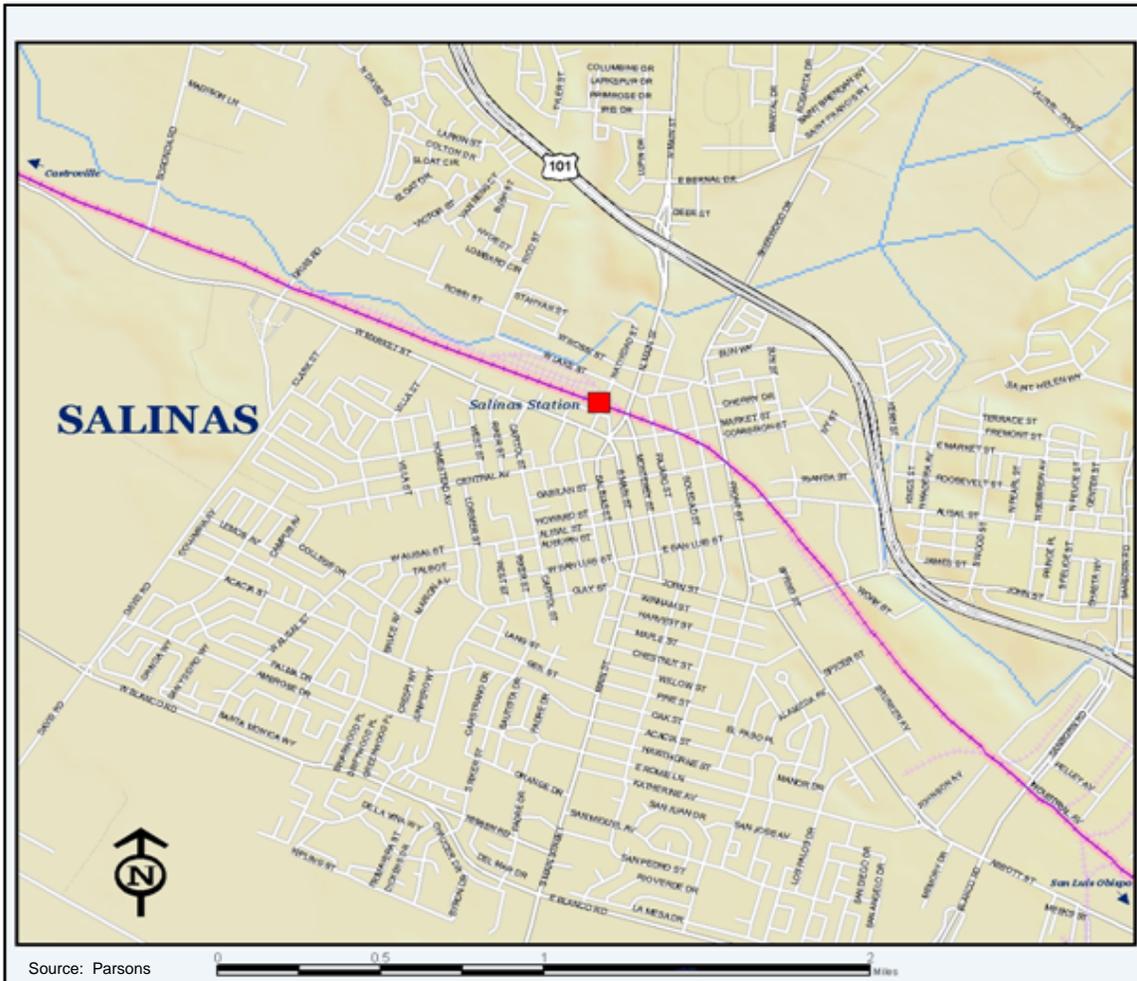


**Castroville
Roadway Network**

PARSONS
Figure 3.14-2

North Main Street is also designated as U.S. Business Highway 101 and State Highway 183. In the vicinity of the station site, North Main Street is a four-lane arterial that runs generally in a north/south direction. At Bataan Memorial Park just east of the station, Main Street connects with a one-way street couplet consisting of Salinas Street (running southbound) and Monterey Street (running northbound).

West Market Street is a four-lane arterial that runs generally in an east/west direction. West of North Main Street, it is also designated as State Highway 183.



**Salinas
 Roadway Network**

PARSONS
 Figure 3.14-3

Station Place is a two-lane local street that runs in a north/south direction. It extends north from West Market Street one block toward the existing Amtrak station.

Lincoln Avenue is a two-lane local street that runs generally in a north/south direction. It extends south from West Market Street for about one half mile, paralleling Main Street.

Transit System

Bus service in the study areas is provided by Monterey-Salinas Transit (MST) the Santa Cruz Metropolitan Transit District (SCMTD), Greyhound Lines, and Amtrak Thruway Motor Coach.

Pajaro Valley

MST operates Routes 28 and 29, which pass by the proposed Pajaro Valley Rail Station on Salinas Road. Route 27 could also potentially be rerouted to serve the proposed station.

SCMTD, otherwise known as METRO, operates seven routes that serve the Watsonville Transit Center, located at 475 Rodriguez Street: Route 69/69A/69W/69N Capitola Road/Cabrillo/Watsonville, Route 71 Watsonville-Santa Cruz, Route 72 Corralitos, Route 74 Ohlone Parkway/Rolling Hills, Route 75 Green Valley, Route 76 Corralitos/Buena Vista, Route 79 East Lake, and Route 91 Commuter Express.

Castroville

MST has recently discontinued Route 25 Gilroy/Monterey linking Monterey, Marina, Castroville, and Prunedale with Gilroy. This route passed by the proposed Castroville Rail Station (Site 2) on SR 156. MST currently services Castroville via routes 27 and 28. These routes are aligned along SR 183/Merritt Street, passing through downtown Castroville. The analysis assumes that these routes would access the station locations (Site 1 and 2) via local streets.

Salinas

The Salinas Amtrak Station is currently served by five MST routes: Route 28 Watsonville (passes the station on Market Street), Route 29 Watsonville (two daily trips to the Amtrak Station; all others pass the station on Market Street), Route 44 Westridge (passes the station on Market Street), Route 45 East Market-Creekbridge (passes the station on Market Street) and Route 46 Natividad (also passes the station on Market Street.)

These routes also serve the Salinas Transit Center, which is located two blocks south of the passenger rail station near Central Avenue, between Lincoln Avenue and Salinas Street. Six additional MST routes serve the Salinas Transit Center: Route 21 Salinas—Monterey via Highway 68, Route 23 Salinas-King City, Route 39 Laguna Seca-Salinas (special service), Route 41/42 East Alisal—Northridge/Westridge, Route 20 Salinas-Monterey via Marina and Route 43 Memorial Hospital.

The Greyhound Bus Station serves passengers traveling on the U.S. 101 corridor between Los Angeles and San Jose. Northbound buses arrive from origins such as Los Angeles and San Luis Obispo and dwell at the station for 5 to 30 minutes before continuing their journey to San Jose via Gilroy or Santa Cruz. Some buses originate or terminate at the Salinas Station. One bus, Schedule Number 6703,

lays over at the station for 3½ hours before originating a new schedule, Number 6712.

Both the Salinas Transit Center and the Greyhound Bus Station will be relocated to the proposed ITC when construction is completed in order to consolidate these transit services at one site.

Bicycle and Pedestrian System

The following describes the bicycle and pedestrian network in the vicinity of the three stations.

Pajaro Valley

Sidewalks are generally provided along Salinas Road between Porter Drive and Railroad Avenue. Utility poles located within these sidewalks reduce their effective width. Sidewalks are not provided along Railroad Avenue or Lewis Road. No sidewalks front the proposed station site along Salinas Road.

No bicycle lanes, paths, or routes are provided within the immediate vicinity of the proposed station site.

Castroville

Sidewalks are generally not provided adjacent to local streets serving the Castroville community. A sidewalk is provided adjacent to Benson Road, Salinas Street and Castroville Boulevard. A pedestrian overcrossing of State Route 156 is also available. No grade separated pedestrian crossing of the Union Pacific Railroad Coast line track is available; however, a gate/lights/bells-protected at-grade crossing is provided at Blackie Road.

There are no bicycle lanes, paths, or routes provided in the vicinity of either the locally preferred Site 2, or the Alternate Castroville Site 1.

Salinas

An extensive system of sidewalks serves the Salinas residential neighborhoods and central business district which surround the Salinas Amtrak Station site.

Sidewalks are present on most local, collector and arterial streets which lead to/from the existing station site.

3.14.3 REGULATORY SETTING

General Plan Policies

Several goals and policies from the *Monterey County General Plan* (1982) and *Salinas General Plan* (2002) apply to the transportation system within the study area. These documents were reviewed as part of this assessment to assist in the development of impact significance criteria. A brief summary of the applicable regulatory guidelines is

provided below. Table 3.14-1 identifies goals, objectives and policies that provide guidance traffic and circulation patterns.

Table 3.14-1

General Plan Goals, Objectives, and Policies
 Traffic and Circulation

Plan Document	Document Section	Document Reference	Policies	Relevant Evaluation Criteria
Salinas General Plan	Circulation Element	September 2002	Strive to maintain traffic Level of Service (LOS) D or better	2, 3, 4, 5, 6, 7, 8, 9, 10
Monterey County General Plan	Circulation Element	1982	Station auto, transit, pedestrian and bicycle access	3, 4, 5, 6, 7, 8, 9, 10
Castroville Community Plan	Draft Circulation Plan	December 1, 2004	Station auto, transit, pedestrian and bicycle access	3, 4, 5, 6, 7, 8, 9, 10
Caltrans	Transportation Concept Report	SR 156, SR 183	Concept D–Rural, E–Urban	1, 2, 3
TAMC Traffic Congestion Management Program	CMP Road Network and LOS	March 23, 1994	LOS Standards Location Specific	1, 2, 3, 5, 6, 7, 8

3.14.4 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The following significance criteria were used to evaluate transportation impacts associated with the proposed Project (Table 3.14-2).

Table 3.14-2

Evaluation Criteria with Point of Significance
Traffic and Circulation

Evaluation Criteria	As Measured by	Point of Significance	Justification
1. Will the Project cause the existing or cumulative no project LOS at Salinas Road in Pajaro, Castroville Boulevard in Castroville, or rural roads operating at LOS C to worsen from LOS C or better to LOS D or worse?	Delay and LOS	LOS D	Caltrans Transportation Concept Report TAMC Traffic CMP
2. Will the Project cause the existing or cumulative no project LOS at an analysis location within the City of Salinas (Market Street and Main Street) or unincorporated Monterey County to worsen from LOS D or better to LOS E or worse?	Delay and LOS	LOS E	Salinas General Plan Caltrans Transportation Concept Report TAMC Traffic CMP
3. Will the Project worsen already (or projected) unacceptable operations at an analysis location?	Delay and LOS	LOS D in Pajaro and Castroville; LOS E in Salinas	Salinas General Plan Castroville Community Plan Caltrans Transportation Concept Report TAMC Traffic CMP CEQA Guidelines Appendix G CEQA Guidelines Appendix G
4. Will the Project create an inconsistency with policies concerning roadway systems set forth in the General Plans for the City of Salinas and Monterey County?	Review of project	Identified inconsistency with policies	Salinas General Plan Castroville Community Plan
5. Will the Project create the demand for public transit service above that which is provided, or planned to be provided?	Evaluation of transit needs	Projected transit demand that exceeds supply	Salinas General Plan TAMC Traffic CMP

Table 3.14-2

Evaluation Criteria with Point of Significance
Traffic and Circulation

Evaluation Criteria	As Measured by	Point of Significance	Justification
6. Will the Project disrupt or interfere with existing or planned public transit services or facilities?	Review of project	Project disrupts transit service	Salinas General Plan Castroville Community Plan TAMC Traffic CMP
7. Will the Project create an inconsistency with policies concerning transit systems set forth in the General Plans for the City of Salinas and Monterey County?	Review of project	Project disrupts transit service or causes unmet transit demand	Salinas General Plan Monterey County General Plan TAMC Traffic CMP
8. Will the Project disrupt or interfere with existing or planned bicycle or pedestrian facilities?	Review of project	Project disrupts pedestrian or bicycle system	Salinas General Plan Monterey County General Plan Castroville Community Plan TAMC Traffic CMP
9. Will the Project create an unmet need for bicycle or pedestrian facilities?	Review of project	Unmet demand for bicycle or pedestrian facilities	Salinas General Plan Monterey County General Plan Castroville Community Plan
10. Will the Project create an inconsistency with policies related to bicycle or pedestrian systems in the General Plans of the City of Salinas and Monterey County?	Review of project	Project disrupts bicycle system or causes unmet bicycle demand	Salinas General Plan Monterey County General Plan Castroville Community Plan

Source: Salinas General Plan, 2002; Monterey County General Plan (1982); Castroville Community Plan, 2004; Caltrans, TAMC CMP, 1994, California Environmental Quality Act Appendix G

3.14.5 METHODOLOGY

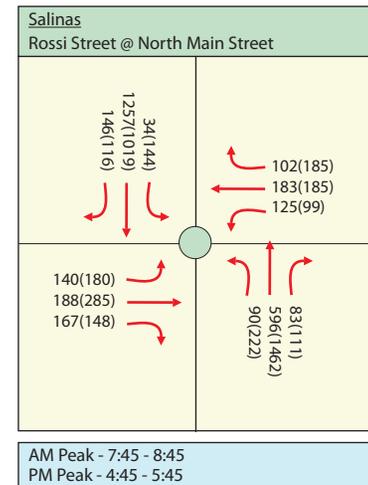
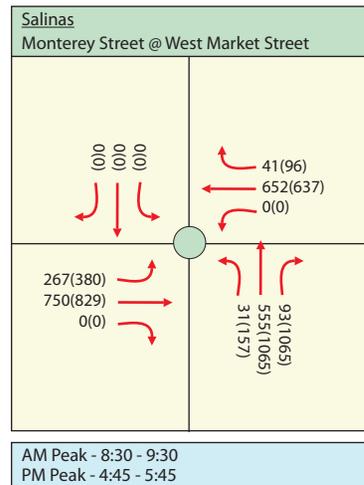
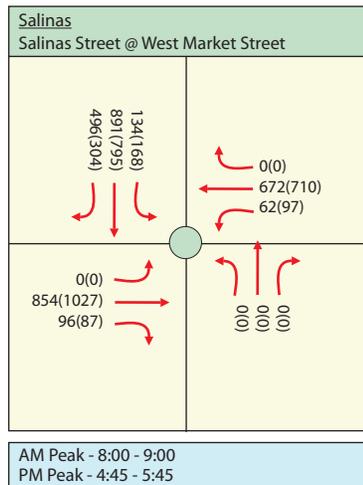
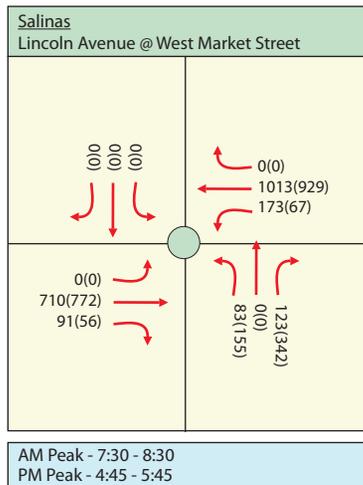
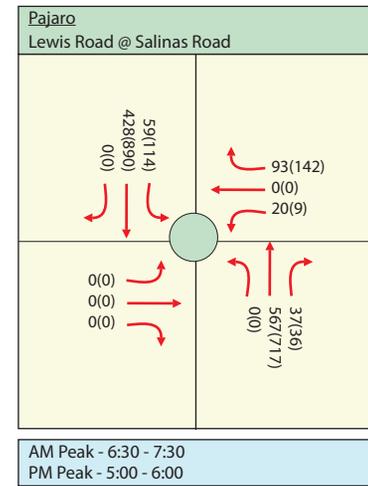
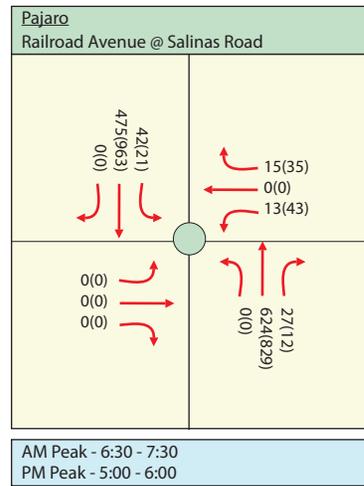
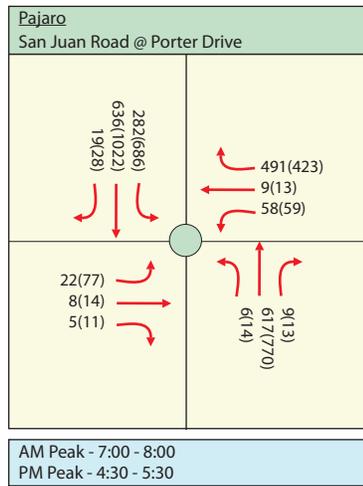
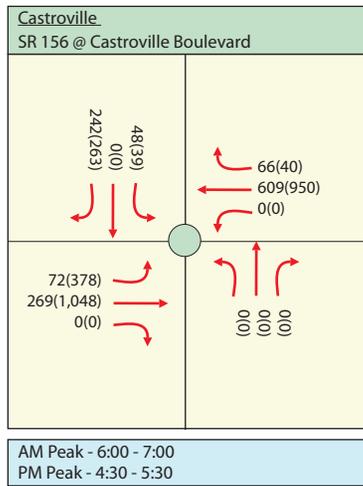
The impact methodology is both quantitative and qualitative. Traffic impacts are evaluated quantitatively based on level of service determinations. Pedestrian, bicycle and transit impacts are assessed qualitatively.

To assess traffic impacts, traffic volumes were counted at key intersections adjacent to or near each locally preferred station site. As these traffic counts were conducted in November 2002 and April 2003, these volumes were increased by a growth factor of two percent per year to represent future conditions when the Caltrain service was projected to be operating. For the purpose of this assessment, two future scenarios were selected: a five-year scenario (approximately 2008) and a ten-year scenario (approximately 2013). Traffic operating conditions were analyzed without the project (termed Background conditions) and with the project (Project Conditions). Traffic operations were also assessed for the year of the traffic counts (2002/2003). Details regarding the methodology follow.

Base Year Traffic Volumes

The intersections of study roadways are a key component of the roadway system. These are the “nodes” that connect each segment of the system. Intersections are usually the critical elements of the roadway system in assuring adequate capacity, minimizing delays, maximizing safety, and minimizing environmental impacts. Therefore, the analysis of project impacts on the roadway system focuses on intersection operations.

Traffic data were obtained for key study area intersections by conducting manual turning-movement counts during AM and PM peak periods of peak traffic flows and during the hours when passenger trains are expected to arrive at and depart from the stations. Traffic counts for Pajaro and Castroville were conducted in November 2002, two weeks before the Thanksgiving holiday period. Traffic counts for Salinas were conducted on April 30, 2003. Existing traffic signal cycle lengths used for the Salinas analysis were based on observations made during those counts; cycle lengths for Pajaro and Castroville are commonly-used default values. (See Draft Traffic Impact Analysis, Monterey County Commuter Rail Stations, Parsons, July 2003 for turning movement counts and traffic volumes worksheets). Figure 3.14-4 shows traffic volumes at study intersections during the peak hours of network traffic. Figure 3.14-5 shows traffic volumes during the projected peak hour of station traffic.

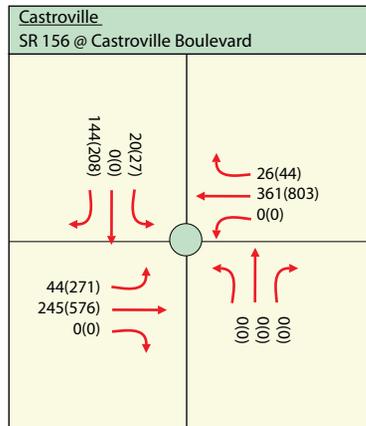


AM(PM) = 00(XX) Peak Hours of Network Traffic Volumes

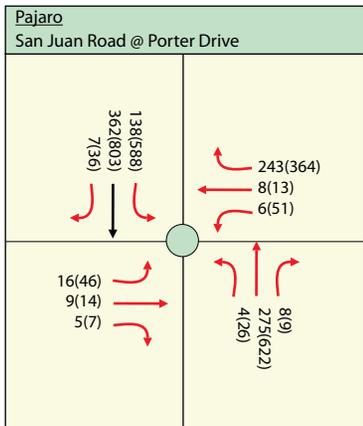
Base Year Traffic Volumes during Network Peak Hour in Pajaro Valley, Castroville, and Salinas

PARSONS

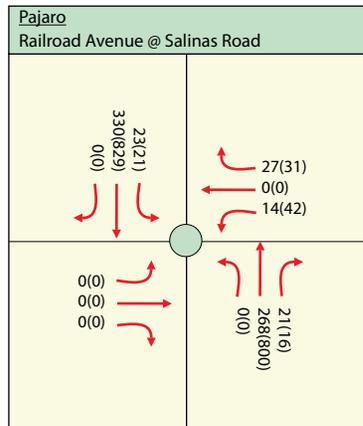
Figure 3.14-4



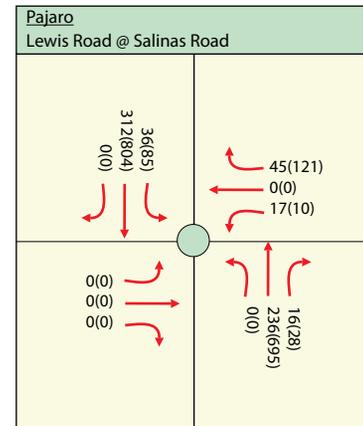
AM Peak - 5:30 - 6:30
PM Peak - 6:00 - 7:00



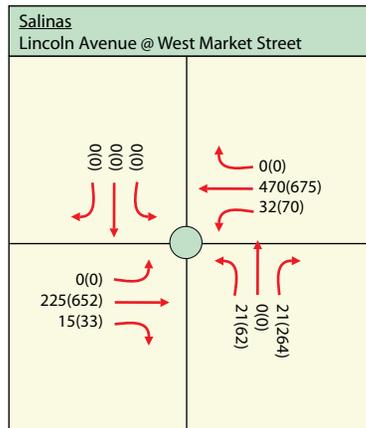
AM Peak - 5:30 - 6:30
PM Peak - 5:45 - 6:45



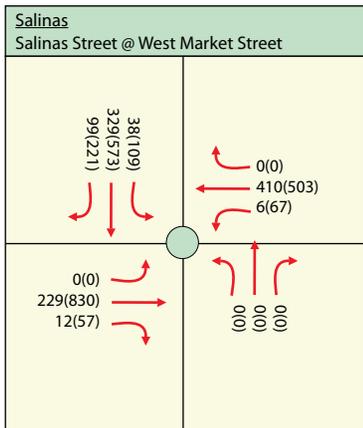
AM Peak - 5:30 - 6:30
PM Peak - 5:45 - 6:45



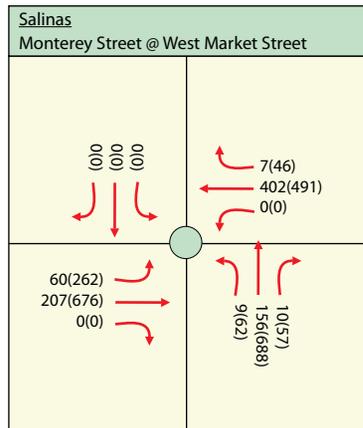
AM Peak - 5:30 - 6:30
PM Peak - 5:45 - 6:45



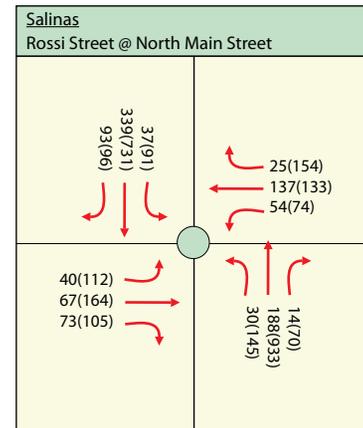
AM Peak - 5:30 - 6:30
PM Peak - 6:00 - 7:00



AM Peak - 5:30 - 6:30
PM Peak - 6:00 - 7:00



AM Peak - 5:30 - 6:30
PM Peak - 6:00 - 7:00



AM Peak - 5:30 - 6:30
PM Peak - 6:00 - 7:00

AM(PM) = 00(XX) Peak Hours of Station Traffic Volumes

Base Year Traffic Volumes during Station Peak Hour in Pajaro Valley, Castroville, and Salinas

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Figure 3.14-5

Intersection Operations (Level of Service)

The operating condition of an intersection is typically described in terms of “Level of Service” (LOS). Both the signalized and unsignalized study intersections were analyzed using Synchro (version 7.0), a traffic engineering analysis software program that calculates intersection level of service based on *Highway Capacity Manual* methodology. Level of service is both a quantitative and qualitative description of an intersection’s operation, ranging from LOS A, or free-flow conditions, to LOS F, or highly congested conditions.

Table 3.14-3 provides Level of Service definitions based on delay per vehicle.

Project impacts were analyzed for the years 2002/2003, 2008 and 2013. Field observations of existing conditions were conducted during the 2002 to 2005 timeframe.

Table 3.14-3

Level of Service Definitions

Signalized Intersections		
Level of Service	Description	Control Delay per Vehicle (Seconds)
A	Free flow; minimal to no delay	≤10
B	Stable flow, but speeds are beginning to be restricted by traffic condition; slight delays.	>10 and ≤20
C	Stable flow, but most drivers can not select their own speeds and feel somewhat restricted, acceptable delays.	>20 and ≤35
D	Approaching unstable flow, and drivers have difficulty maneuvering; tolerable delays.	>35 and ≤55
E	Unstable flow with stop and go; delays.	>55 and ≤80
F	Total breakdown; congested conditions with excessive delay.	>80
Unsignalized Intersections		
Level of Service	Description	Control Delay per Vehicle (Seconds)
A	Free flow; minimal to no delay	≤10
B	Stable flow, but speeds are beginning to be restricted by traffic condition; slight delays.	>10 and ≤15
C	Stable flow, but most drivers can not select their own speeds and feel somewhat restricted, acceptable delays.	>15 and ≤25
D	Approaching unstable flow, and drivers have difficulty maneuvering; tolerable delays.	>25 and ≤35
E	Unstable flow with stop and go; delays.	>35 and ≤50
F	Total breakdown; congested conditions with excessive delay.	>50

Source: 2000 Highway Capacity Manual

Base Year Traffic Conditions

Intersection operations were assessed for the base year (2002/2003) to provide a reference point for future conditions. The results of the base year intersection level of service analysis are presented in Table 3.14-4. The base year analysis is for the year 2002/2003.

Table 3.14-4

Base Year (2002/2003) Intersection Levels of Service

Intersection	Peak	Baseline LOS	Delay, sec [†]
Pajaro Valley			
Porter Drive at San Juan Road (s)	Caltrain AM	B	19.1
	Network AM	B	19.2
	Caltrain PM	C	20.9
	Network PM	B	19.9
Salinas Road at Railroad Avenue (u) Westbound movements	Caltrain AM	B	14.6
	Network AM	D	28.3
	Caltrain PM	F	93.6
	Network PM	F	150.3
Salinas Road at Lewis Road (u) Westbound movements	Caltrain AM	B	10.9
	Network AM	B	14.0
	Caltrain PM	B	14.6
	Network PM	C	15.3
Castroville			
SR 156 at Castroville Boulevard(s)	Caltrain AM	B	15.9
	Network AM	B	16.8
	Caltrain PM	B	19.0
	Network PM	C	24.5
Castroville Boulevard at Station Driveway (u) Eastbound movements	Caltrain AM	A	9.5
	Network AM	B	10.7
	Caltrain PM	B	11.2
	Network PM	B	12.5
Salinas			
Lincoln Avenue at West Market Street (s)	Caltrain AM	B	12.3
	Network AM	B	15.0
	Caltrain PM	B	14.1
	Network PM	B	11.7
Station Place at West Market Street (u) Southbound movements	Caltrain AM	B	14.4
	Network AM	F	61.6
	Caltrain PM	D	30.3
	Network PM	F	55.9
Salinas Street at West Market Street (s) **	Caltrain AM	B	11.4
	Network AM	E	64.7
	Caltrain PM	B	17.3
	Network PM	C	24.0
Monterey Street at East Market Street (s)	Caltrain AM	B	20.0
	Network AM	C	22.9
	Caltrain PM	B	16.5
	Network PM	D	37.9
Rossi Street at North Main Street (s)	Caltrain AM	C	24.9
	Network AM	C	28.8
	Caltrain PM	C	27.9
	Network PM	D	47.0

Source: Parsons

*Observations at these intersections indicate that spillback conditions sometimes bring traffic flow to a standstill, reducing traffic flow and the resulting counts. This condition can result in analysis results that do not accurately reflect conditions.

**See Table 3.14-3 for LOS definitions.

†Delay in seconds. This number represents the average intersection delay at signalized intersections and the approach delay at unsignalized intersections.

The results of the level of service analysis indicate that under base year conditions, two study intersections in Pajaro operate at an acceptable level of service and with excess capacity during all peak periods. The stop-controlled approach of Railroad Avenue at Salinas Road, however, operates at LOS F during both the p.m. network peak hour and the p.m. peak hour of projected Caltrain-generated traffic.

In Castroville, all study-area intersections operate at acceptable levels of service (LOS C or better) and with excess capacity during all peak periods.

In Salinas, three study intersections operate at an acceptable level of service (LOS D or better) and with excess capacity during all peak periods. However, the stop-controlled approach of Station Place at West Market Street currently operates at LOS E during the morning peak hour of network traffic. Field observation of existing traffic operations during the network evening peak indicates that traffic queues spill back from the intersection of Rossi Street and North Main Street to adjacent intersections, including the Salinas Street/West Market Street and Monterey Street/East Market Street intersections as well as the Lincoln Avenue at West Market Street intersection. At times, this area of downtown Salinas appears to be gridlocked. Because such conditions reduce the traffic volumes entering and exiting the study intersections, level of service analysis (based on the hourly traffic volumes) can falsely indicate acceptable operations. The City of Salinas is completing improvements on Rossi Street that include capacity enhancements that would help to reduce queuing backup.

3.14.6 BACKGROUND (NO PROJECT) TRAFFIC CONDITIONS

Background Conditions are those conditions caused by existing traffic and future growth. The background analysis represents the "No Project" condition.

In the Pajaro station vicinity, no additional planned developments were included in this analysis. In the vicinity of the Castroville station, a transit-oriented development is proposed in the Community Plan. Although this development is proposed, the development is not approved and has therefore not been included in this analysis. According to the Salinas Redevelopment Agency, a previously proposed 14-story hotel and mixed use development nearby the station location is not currently approved and thus has not been included in this analysis. A movie theater and a parking structure in the project vicinity have recently been developed. Traffic to/from the movie theater peaks at a different time than both the proposed station in Salinas as well as the adjacent street traffic.

To account for likely but unspecified growth, a 2% annual increase in traffic (growth rate) was applied to base year volumes to project 5-year (2008) and ten year (2013) Background Conditions. This is the annual rate of growth used by Caltrans in its Traffic Operational Analysis for Route 156 from Route 183 to Meridian Road and is based on Department of Finance population projections for the region and the AMBAG traffic model. Geometry and signal timing for the background conditions were not changed from that of the existing conditions. The results of the background intersection level of service analysis are presented in Table 3-14.5.

Table 3.14-5

Background 5-year (2008) and Ten Year (2013) Intersection Levels of Service

Intersection	Peak	Condition					
		Baseline LOS**	Delay, sec†	5-Year Background LOS**	Delay, sec†	10-Year Background LOS**	Delay, sec†
Pajaro Valley							
Porter Drive at San Juan Road	Caltrain AM	B	19.1	B	19.4	B	19.7
	Network AM	B	19.2	B	19.2	B	19.7
	Caltrain PM	C	20.9	C	20.5	C	21.1
	Network PM	B	19.9	C	21.1	C	22.3
Salinas Road at Railroad Avenue (westbound leg)	Caltrain AM	B	14.6	C	15.7	C	17.2
	Network AM	D	28.3	D	34.2	E	43.5
	Caltrain PM	F	93.6	F	170.0	F	349.6
	Network PM	F	150.3	F	296.1	F	603.1
Salinas Road at Lewis Road (westbound leg)	Caltrain AM	B	10.9	B	11.2	B	11.6
	Network AM	B	14.0	C	15.1	C	16.7
	Caltrain PM	B	14.6	C	16.1	C	18.3
	Network PM	C	15.3	C	17.3	C	20.3
Castroville							
SR 156 at Castroville Boulevard	Caltrain AM	B	15.9	B	16.2	B	16.4
	Network AM	B	16.8	B	16.8	B	17.0
	Caltrain PM	B	19.0	C	20.6	C	21.6
	Network PM	C	24.5	C	30.3	D	51.9
Castroville Boulevard at Station Driveway (eastbound leg)	Caltrain AM	A	9.5	A	9.7	A	9.8
	Network AM	B	10.7	B	11.1	B	11.5
	Caltrain PM	B	11.2	B	11.6	B	12.1
	Network PM	B	12.5	B	13.2	B	14.1
Salinas							
Lincoln Avenue at West Market Street*	Caltrain AM	B*	12.3	B*	12.5	B*	12.6
	Network AM	B*	15.0	B*	16.4	D*	52.2
	Caltrain PM	B*	14.1	B*	15.3	B*	16.3
	Network PM	B*	11.7	B*	18.7	E*	68.5

Intersection	Peak	Condition					
		Baseline LOS**	Delay, sec†	5-Year Background LOS**	Delay, sec†	10-Year Background LOS**	Delay, sec†
Station Place at West Market Street (southbound leg)	Caltrain AM	B	14.4	C	15.5	C	16.9
	Network AM	F	61.6	F	88.2	F	138.4
	Caltrain PM	D	30.3	E	37.0	E	47.0
	Network PM	F	55.9	F	78.6	F	119.2
Salinas Street at West Market Street*	Caltrain AM	B*	11.4	B*	11.8	B*	12.2
	Network AM	E*	64.7	F	188.6	F	191.1
	Caltrain PM	B*	17.3	B*	16.6	B*	18.0
	Network PM	C*	24.0	D*	48.7	F	104.5
Monterey Street at East Market Street*	Caltrain AM	B*	20.0	B*	19.8	B*	19.9
	Network AM	C*	22.9	E*	59.9	E*	31.1
	Caltrain PM	B*	16.5	C*	24.2	C*	25.8
	Network PM	D*	37.9	E*	58.5	E*	73.8
Rossi Street at North Main Street*	Caltrain AM	C*	24.9	C*	25.8	C*	26.5
	Network AM	C*	28.8	C*	33.1	D*	42.8
	Caltrain PM	C*	27.9	C*	28.6	C*	30.8
	Network PM	D*	47.0	E*	60.8	F*	89.7

Source: Parsons

*Observations at these intersections indicate that spillback conditions sometimes bring traffic flow to a standstill, reducing traffic flow and the resulting counts. This condition can result in analysis results that do not accurately reflect conditions.

**See Table 3.14-3 for LOS definitions.

†Delay in seconds. This number represents the average intersection delay at signalized intersections and the approach delay at unsignalized intersections.

In Salinas, the southbound movement of Station Place at West Market Street is projected to experience increased delay during the evening peak hour of network traffic (when the LOS will decline from D to E). The Monterey Street/East Market Street intersection is projected to decline from LOS C to LOS E during the morning network peak and from LOS D to LOS E during the evening peak hour of network traffic. The Salinas Street at West Market Street intersection is projected to decline from E to F during the morning peak hour of network traffic and from C to D during the evening peak hour of network traffic. The Rossi Street and North Main Street intersection is projected to experience increased delay during the evening peak hour of network traffic (when the LOS declines from D to E). Traffic operations at the intersection of Lincoln Avenue and West Market Street is not projected to decline significantly during any of the peak periods.

In the ten-year background scenario, traffic operations in Pajaro will continue to occur with slightly increased delay but at the same levels of service as during the five-year background scenario, with one exception. The stop-controlled approach of Railroad Avenue to Salinas Road during the morning peak hour of network traffic will decline from LOS D to LOS E.

Traffic operations in Castroville are projected to occur at the same levels of service during the ten-year background scenario as experienced during the five-year background scenario one with exception. The intersection of SR 156 at Castroville Boulevard during the evening peak hour of network traffic will decline from LOS C to LOS D.

In Salinas, the intersection of Lincoln Avenue at West Market Street is project to decline from LOS B to LOS D during the morning peak hour of network traffic and from LOS B to LOS E during the evening peak hour of network traffic. Salinas Street at West Market Street is projected to decline from LOS D to LOS F during the evening peak hour of network traffic. Rossi Street and North Main Street is projected to decline from LOS C to LOS D during the morning peak hour of network traffic and from LOS E for the five-year background (no project) scenario to LOS F for the ten-year background (no project) scenario during the evening peak hour of network activity.

In several locations, a slight reduction in delay occurs between the base year (2002/2003) condition and the five-year background (2008) condition or between the five-year and ten-year (2013) background conditions. This can be attributed to the increase in traffic volumes on the minor approaches to the intersections.

PROJECT CONDITIONS

The methodology for assessing project traffic impacts involves examining trips generated or attracted to the stations, the distribution of where these trips come from or are destined to, and the routes motorists use to access the station.

Trip Generation

Daily ridership estimates were forecast for each of the proposed commuter rail stations based on the methodology reported in *Ridership Estimates for Caltrain Extension*,

located in Appendix B of the *Project Study Report*. Estimates were performed for both the 5-year and Ten Year scenarios. The 5-year scenario considered operation of two round trip trains per day and considered Background traffic conditions as the basis for analysis. The Ten Year scenario considered operation of four round trip trains per day and 2013 Background conditions as the basis of analysis. Year 2009 is the currently projected year of opening, and the 5-year scenario is thus most relevant to this analysis of impacts.

The percentage of total ridership arriving and departing via automobile was estimated based on the 2001 Caltrain passenger origin and destination survey and knowledge of each station's market area. It is projected that 86 percent of riders will arrive by automobile in Pajaro, 73 percent in Castroville, and 60 percent in Salinas.

The ridership totals resulting from these percentages were multiplied by two for park-and-ride boardings (one entering trip in the morning and one exiting trip in the evening) or by four for kiss-and-ride boardings (one entering and one exiting trip in the morning plus one entering and one exiting trip in the evening).

These totals were divided by two to separate the morning's departing riders and the evening's arriving riders.

The resulting totals for morning and evening were multiplied by 60 percent to represent the number of riders that would arrive during the single peak hour of the morning or evening station-generated traffic (based on boarding patterns at the Gilroy Caltrain station).

The single peak 60 minutes for Caltrain ridership, in most cases, will not coincide with the peak hour observed on the adjacent street network. In those cases, the 60 minute time slice during the morning and evening periods that would represent the ridership peak—and therefore the trip generation peak—was assumed to be the 60 minutes in the morning when the last scheduled train would depart and the 60 minutes in the evening when the first scheduled train would arrive¹. In cases where this peak 60 minute time slice did not fall within the observed peak hour on the adjacent network, the 60 minute time slice that was closest to the network peak (while still containing a scheduled Caltrain arrival or departure) was selected. This resulted in a “worst-case” analysis scenario in which as much of the Caltrain peak traffic as possible overlaps with the network peak traffic.

In cases in which there was partial overlap between the Caltrain peak 60 minute time slice of traffic generation and the network peak hour, a judgment was made regarding the

¹ On August 1, 2005, Caltrain updated its service with faster trains and a new schedule which included three trains instead of four serving the south end of the San Francisco to San Jose/Gilroy line. For the purposes of this study, the new schedule was compared to the previous schedule upon which this analysis was based to ensure that the results were still comparable. Parsons' proposed schedule for the capacity study for northbound trains involved the utilization of four trains from Salinas to San Francisco. The proposed utilization for the southbound direction also included four trains. The revised Caltrain schedule was reviewed and during the AM and PM peak periods, the arrival and departure times at the proposed Salinas station will be within the same window of time as those analyzed for this study. Therefore, the peak hour traffic volumes that were used for the level of service calculations are still applicable with the new Caltrain schedule.

percentage of peak 60 minute time slice project trips that would take place within the network peak hour.

- At Pajaro, traffic volumes on the roadway network peak from 6:30 to 8:00 a.m. in the morning and from 4:30 to 6:00 p.m. in the evening.
- At the Pajaro site, the peak 60 minutes of morning station activity is projected to take place from 5:30 to 6:30 a.m., assuming that most riders will take the last train at 6:34 a.m. The next-latest train leaves at 5:35 a.m. in the 5-year scenario, so no riders on that train are projected to arrive at the station during the 5:30-to-6:30 a.m. period. In the Ten Year scenario, the next-latest train leaves at 6:00 a.m. With four trains arriving over a two-hour period in the morning, 60 percent of riders are projected to use the station during the 5:30 to 6:30 a.m. hour just as in the 5-year, two-train scenario.

In both the 5-year and 10-year scenarios, none of the peak 60 minute time slice Caltrain trips are projected to take place within the adjacent roadway network peak hour of 7:00 to 8:00 a.m. at the intersection of San Juan Road and Porter Drive; or the network peak hour of 6:30 to 7:30 a.m. at the intersections of Salinas Road at Railroad Avenue and Salinas Road at Lewis Road. This assumes that the riders on the 6:34 train will stop arriving at the station by 6:30 a.m.

- At the Pajaro site, the peak 60 minutes of evening station activity is projected to take place from 5:45 to 6:45 p.m., assuming that most riders will take the first train and arrive at 6:10 p.m. Kiss-and-ride drivers are assumed to begin to arrive 15 minutes prior to the arrival of the train. The second train arrives at 7:03 p.m. in both the 5-year and the 10-year scenarios.

In both the Five and 10-year scenarios, none of the peak Caltrain trips are projected to take place within the network peak hour of 4:30 to 5:30 p.m. at the intersection of San Juan Road and Porter Drive. At the intersections of Salinas Road at Railroad Avenue and Salinas Road at Lewis Road, in both scenarios, 50 percent of the peak Caltrain trips are projected to take place from 5:45 to 6:15 p.m., coinciding with the network peak hour of 5:00 to 6:00 p.m.

- At Castroville, traffic volumes on the roadway network peak from 6:00 to 7:00 a.m. in the morning and from 4:30 to 5:30 p.m. in the afternoon. These peak hours may differ on weekends; however, commuter rail service is not projected to operate on Saturdays and Sundays. Hence, only weekday traffic operations are considered.

At the Castroville site, the peak 60 minutes of morning station activity is projected to take place from 5:30 to 6:30 a.m., assuming that most riders will take the last train at 6:16 a.m. The next-latest train leaves at 5:17 a.m. in the 5-year scenario, so no riders on that train are projected to arrive at the station during the 5:30-6:30 a.m. period. In the 10-year scenario, the next-latest train leaves at 5:42 a.m. With four trains arriving over a two-hour period in the morning, 60

percent of riders are projected to use the station during the peak 60 minutes of passenger arrivals, just as in the 5-year, two-train scenario.

In the 10-year scenario, 100 percent of the peak Caltrain trips are projected to take place from 6:00 to 6:30 a.m., coinciding completely with the network peak hour. In the 10-year scenario, it is assumed that half of the new trips generated by the 5:42 and 6:16 trains will take place in the 6:00 to 6:30 a.m. timeframe; therefore, 50 percent of the total peak-station-hour trips were applied to the network peak hour scenario.

- At the Castroville site, the peak 60 minutes of evening station activity is projected to take place from 6:00 to 7:00 p.m., assuming that most riders will take the first train and arrive at 6:30 p.m. Kiss-and-ride drivers will begin to arrive 15 minutes prior to the arrival of the train. The second train arrives at 7:23 p.m. in both the Five and 10-year scenarios; there should be little or no overlap of traffic generated by these two trains within this study hour.

None of the peak Caltrain trips will take place within the adjacent street network peak hour of 4:30 to 5:30 p.m. under either the 5-year or the 10-year scenario.

- At Salinas, traffic volumes on the adjacent roadway network peak from 7:30 to 9:30 a.m. in the morning and from 4:45 to 5:45 p.m. in the afternoon.
- At the Salinas station site, the peak 60 minutes of morning station activity is projected to take place from 5:30 to 6:30 a.m., assuming that most riders will take the last departing train at 5:59 a.m. In the 5-year scenario, the first train is scheduled to leave at 5:00 a.m., so no riders are projected to arrive within the adjacent street network peak hour. During the 10-year scenario, the next-latest train leaves at 5:25 a.m. With four trains departing Salinas over a two-hour period in the morning, 60 percent of riders are projected to use the station during the 60 minutes of heaviest boarding activity just as in the 5-year, two-train scenario.

In both the Five and 10-year scenarios, none of the peak Caltrain trips are projected to take place within the network peak hour at any of the study-area intersections.

- At the Salinas station site, the peak 60 minutes of evening station activity is projected to take place from 6:00 to 7:00 p.m., assuming that most riders will take the first train which arrives in Salinas at approximately 6:45 p.m. Kiss-and-ride drivers will begin to arrive 15 minutes prior to the arrival of the train. The second train is projected to arrive at approximately 7:38 p.m. in both the 5-year and the 10-year scenarios, so there should be little or no overlap of traffic generated by the two trains.

None of the Caltrain trips will take place during the peak hour of adjacent street traffic (4:45 to 5:45 p.m.) under either the 5-year or the 10-year scenario.

Trip Distribution

The project trip distribution pattern was estimated based on the roadway network and the surrounding land uses. Geographic Information System software was used to determine population patterns in the station catchment areas and to calculate the percentage of riders within each market area that would approach the station from each major approach.

In Pajaro, the major directions of approach and departure to and from the project site are:

- 85 percent on Main Street/Porter Road/Salinas Road to and from the northwest
- 2 percent on San Juan Road to and from the northeast
- 2 percent on Railroad Avenue to and from the east and northeast
- 2 percent on Lewis Road to and from the southeast
- 9 percent on Salinas Road to and from the southwest

In Castroville, the major directions of approach and departure to and from the project site are:

- 50 percent on SR 156 to and from the west
- 25 percent on Castroville Boulevard to and from the northeast
- 25 percent on SR 156 to and from the east and southeast

Castroville residents who live to the west of the Union Pacific Railroad line and drive to the station, are anticipated to use the local north/south and east/west grid of streets leading to Benson Road. No directional distribution of local traffic is assumed, as parking accessed by Benson Road is provided for the convenience of local residents.

No quantitative assessment of potential traffic impacts associated with Site 1 was performed. Insofar as traffic impacts, Site 1 was considered unacceptable by local residents, county staff, and elected representatives due to existing traffic conditions on Merritt Road (SR 183).

In Salinas, the major directions of approach and departure to and from the project site are:

- 15 percent on West Market Street to and from the west
- 25 percent on North Main Street to and from the north
- 10 percent on Sherwood Drive to and from the northeast
- 35 percent on East Market Street to and from the east
- 5 percent on Front Street to and from the southeast
- 10 percent on Monterey Street and Salinas Street (one-way pair) to and from the south

Trip Assignment

The trips generated by the proposed stations were assigned to specific roadways and turning movements were estimated based on the trip distribution patterns discussed above.

In Pajaro, the proposed project has two entrances on Salinas Road. The primary entrance will have a left-turn pocket provided on southbound Salinas Road. The other entrance, several hundred feet south of the first, will be right-in/right-out only, with a median barring access to or from southbound Salinas Road.

In Castroville, the proposed project has one entrance at Castroville Boulevard aligned with the currently unpaved Collins Road. Local residents who are kiss-and-ride passengers will also be able to approach the station platform via Benson Road where a small parking area for local residents will be provided. As a worst-case scenario, all project vehicle trips have been assigned to the Castroville Boulevard entrance.²

In Salinas, the proposed project has either two (Option 17) or four (Option 18) access/egress points, all on West Market Street. The site plan will include a northern extension of Lincoln Avenue into the station site, resulting in a four-legged signalized intersection that will serve as the primary entrance and exit for the station site. Station Place will be closed. With design Option 17, Palmetto Street is also available to accommodate a small portion of station traffic. With design Option 18, Palmetto Street, Happ Place and Vale Street are all available to accommodate Caltrain parking access, in addition to Lincoln Avenue. The analysis of traffic impact assumes that all MST in-service buses will enter and exit the station via Lincoln Avenue. As a worst case scenario (Option 17), all automobile traffic entering from the west or exiting to the east and most of the automobile traffic entering from the east or exiting to the west is also assumed to approach the station via Lincoln Avenue. A small portion of the automobile traffic arriving from the east or departing to the west is assumed to approach via Palmetto Street.

²For the purpose of the traffic impact assessment, project trips to/from the Castroville Station at Site 2 were treated as newly generated trips rather than existing trips diverted from State Route 156. While this assumption likely double counts these trips through the SR 156/Castroville Boulevard intersection, the analysis provides a worst case assessment of the traffic impacts at this location.

3.14.7 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION MEASURES

IMPACT: **TC-1: Will the Project cause the existing or cumulative no project LOS at Salinas Road in Pajaro, Castroville Boulevard in Castroville, or rural roads operating at LOS C or better to worsen to LOS D or worse?**

Analysis: *Significant; LPA, Alternate Castroville Site*

Table 3.14-6 summarizes the comparison of level of service between the base year, background (no project) and project conditions. Intersections experiencing significant project LOS impacts are indicated in bold text. This intersection is Salinas Road at Pajaro Valley Station driveway 1.

In the project scenarios, almost all Pajaro Valley intersections will operate at the pre-project (Background) levels during all peak periods. One exception is the westbound stop-controlled approach of Railroad Avenue at Salinas Road, which will decline to LOS D during the morning peak hour of station activity under the 10-year project scenario. The stop-controlled leg of Driveway 1 will operate at LOS F during the evening peak hour of Caltrain operations.

Mitigation: **TC-1: Install traffic signal at Salinas Road and Railroad Avenue in Pajaro.**

The Pajaro Valley Station project description shall include the installation of a traffic signal at Salinas Road and Railroad Avenue. This traffic signal will allow for gaps in traffic flows to facilitate traffic exiting the station site.

After
Mitigation *Less than Significant*

Implementation of Mitigation Measure TC-1 would reduce impacts resulting from level of service decline.

Table 3.14-6

Project 5-year (2008) and 10-year (2013) Intersection Levels of Service

Intersection	Peak	Peak Hour	Condition									
			Baseline LOS**	Delay, sec†	5-Year Background LOS**	Delay, sec†	10-Year Background LOS**	Delay, sec†	5-Year Project LOS**	Delay, sec†	10-Year Project LOS**	Delay, sec†
Pajaro Valley												
Porter Drive at San Juan Road	Caltrain AM	5:30-6:30	C	21.1	C	21.6	C	22.4	C	23.2	C	27.6
	Network AM	7:00-8:00	B	15.4	C	29.4	C	30.2	C	30.0	C	31.0
	Caltrain PM	5:45-6:45	D	39.4	D	42.0	D	45.7	D	43.3	D	51.7
	Network PM	4:30-5:30	D	44.5	E	59.3	F	123.9	E	60.3	F	126.2
Salinas Road at Railroad Avenue (westbound leg)	Caltrain AM	5:30-6:30	B	14.6	C	15.7	C	17.2	C	19.0	D	25.9
	Network AM	6:30-7:30	D	28.3	D	34.2	E	43.5	E	35.6	E	45.6
	Caltrain PM	5:45-6:45	F	93.6	F	170.0	F	349.6	F	282.4	F	801.1
	Network PM	5:00-6:00	F	150.3	F	296.1	F	603.1	F	388.7	F	907.4
Salinas Road at Station Driveway 1 (westbound leg)	Caltrain AM	5:30-6:30							C	17.9	D	26.1
	Network AM	6:30-7:30	N/A		N/A		N/A		C	20.3	C	22.0
	Caltrain PM	5:45-6:45							D	31.3	E	46.3
	Network PM	5:00-6:00							D	30.6	E	38.8
Salinas Road at Station Driveway 2 (westbound leg)	Caltrain AM	5:30-6:30							A	9.4	A	9.6
	Network AM	6:30-7:30	N/A		N/A		N/A		B	11.0	B	11.3
	Caltrain PM	5:45-6:45							B	12.9	C	15.5
	Network PM	5:00-6:00							B	12.6	B	14.1
Salinas Road at Lewis Road (westbound leg)	Caltrain AM	5:30-6:30	B	10.9	B	11.2	B	11.6	B	11.3	B	11.7
	Network AM	6:30-7:30	B	23.0	C	15.1	C	16.7	C	15.1	C	16.7
	Caltrain PM	5:45-6:45	B	14.6	C	16.1	C	18.3	C	16.2	C	18.5
	Network PM	5:00-6:00	C	15.3	C	17.3	C	20.3	C	17.4	C	20.5
Castroville												
SR 156 at Castroville Boulevard	Caltrain AM	5:30-6:30	B	11.6	B	11.8	B	12.0	B	12.6	B	12.7
	Network AM	6:00-7:00	B	13.3	B	13.3	B	13.8	B	14.1	B	14.8
	Caltrain PM	6:00-7:00	C	20.4	C	26.1	C	26.1	C	26.3	C	25.2
	Network PM	4:30-5:30	C	27.9	C	30.3	D	51.9	C	30.3	D	51.9
Castroville Blvd at Station Driveway (eastbound leg)	Caltrain AM	5:30-6:30	A	9.5	A	9.7	A	9.8	A	9.8	B	10.4
	Network AM	6:00-7:00	B	10.7	B	11.1	B	11.5	B	11.1	B	14.1
	Caltrain PM	6:00-7:00	B	11.2	B	11.6	B	11.6	B	11.6	B	19.0
	Network PM	4:30-5:30	B	12.5	B	13.2	B	13.2	B	13.2	B	14.1

Intersection	Peak	Peak Hour	Condition									
			Baseline LOS**	Delay, sec†	5-Year Background LOS**	Delay, sec†	10-Year Background LOS**	Delay, sec†	5-Year Project LOS**	Delay, sec†	10-Year Project LOS**	Delay, sec†
Salinas												
Lincoln Avenue at West Market Street*	Caltrain AM	5:30-6:30	B*	11.8	B*	12.5	B*	13.1	B*	14.5	C*	24.7
	Network AM	7:30-8:30	B*	19.7	C*	22.6	C*	22.9	D*	49.6	D*	52.0
	Caltrain PM	6:00-7:00	B*	14.3	B*	15.0	B*	19.2	D*	40.0	D*	54.1
	Network PM	4:45-5:45	B*	17.6	B*	19.8	C*	32.0	C*	32.5	D*	44.1
Station Place at West Market Street (south-bound leg)	Caltrain AM	5:30-6:30	B	14.5	C	15.5	C	16.8	N/A		N/A	
	Network AM	7:30-8:30	F	61.3	F	88.3	F	137.9				
	Caltrain PM	6:00-7:00	D	30.3	E	37.0	E	47.0				
	Network PM	4:45-5:45	F	55.9	F	78.2	F	119.1				
Salinas Street at West Market Street*	Caltrain AM	5:30-6:30	A*	8.6	A*	8.7	A*	8.8	A*	8.7	B*	18.8
	Network AM	8:00-9:00	D*	49.4	E*	56.4	F*	117.1	E*	65.0	F*	118.2
	Caltrain PM	6:00-7:00	B*	12.7	B*	13.8	B*	19.0	C*	21.0	D*	50.1
	Network PM	4:45-5:45	D*	50.0	F*	90.1	F*	166.7	F*	93.4	F*	174.2
Monterey Street at East Market Street*	Caltrain AM	5:30-6:30	B*	14.3	B*	14.6	B*	15.1	B*	17.7	B*	16.0
	Network AM	8:30-9:30	D*	51.7	D*	52.6	D*	52.8	D*	52.6	D*	53.7
	Caltrain PM	6:00-7:00	B*	18.4	C*	20.1	D*	46.5	C*	28.7	C*	30.9
	Network PM	4:45-5:45	C*	33.3	F*	92.4	F*	113.0	F*	92.4	F*	114.6
Rossi Street at North Main Street*	Caltrain AM	5:30-6:30	B*	17.7	B*	18.0	B*	18.4	B*	18.3	B*	19.0
	Network AM	7:45-8:45	C*	32.0	C*	33.1	D*	42.8	C*	33.1	D*	42.9
	Caltrain PM	6:00-7:00	C*	27.9	C*	29.8	C*	30.6	C*	30.1	C*	33.1
	Network PM	4:45-5:45	D*	42.6	D*	52.6	E*	68.4	D*	52.6	E*	68.4

Source: Parsons

*Observations at these intersections indicate that spillback conditions sometimes bring traffic flow to a standstill, reducing traffic flow and the resulting counts. This condition can result in analysis results that do not accurately reflect conditions.

**See Table 3.14-4 for LOS definitions.

†Delay in seconds. This number represents the average intersection delay at signalized intersections and the approach delay at unsignalized intersections.

IMPACT: TC-2: Will the Project cause the existing or cumulative no project LOS at an analysis location within the City of Salinas (Market Street and Main Street) or unincorporated Monterey County to worsen from LOS D or better to LOS E or worse?

Analysis: *Significant*; LPA, Alternate Castroville Site

The westbound stop-controlled approach of Railroad Avenue at Salinas Road will decline to LOS E during the morning peak hour under the 5-year project condition.

In Castroville and Salinas, there is no decline at any of the study intersections from LOS D or better to LOS E or worse during any of the study peaks.

Mitigation: The Pajaro Valley Station project description shall include the installation of a traffic signal at Salinas Road and Railroad Avenue (*see Mitigation Measure TC-1*). This traffic signal will allow for gaps in traffic flows to facilitate traffic exiting the station site.

After

Mitigation *Less than Significant*

Implementation of Mitigation Measure TC-1 would reduce impacts resulting from level of service decline.

IMPACT: TC-3: Will the Project worsen already (or projected) unacceptable operations at an analysis location?

Analysis: *Significant*; LPA, Alternate Castroville Site

In Pajaro Valley, the study intersection of Porter Drive at San Juan Road remains at LOS E under the 5-year project condition but has a one second increase in delay during the PM peak hour of the roadway network. Under the 10-year project condition, this study intersection remains at LOS F and has a 2.3 second delay increase during the PM peak hour of the roadway network. The Salinas Road at Railroad Avenue study intersection remains at LOS E during the AM peak hour of network traffic with 2.1 second increase in delay. This same study intersection remains at LOS F during both the 5-year and 10-year project scenarios under two conditions – the PM peak hour of the network peak and the PM peak hour of the station peak.

In Castroville, no study intersection operations are worsened by project traffic that are currently operating at unacceptable levels.

The Salinas Street at West Market Street study intersection in Salinas continues to operate at LOS E during the 5-year project scenario in the AM peak hour of network traffic. There is an 8.6 second increase in delay between the background and 5-year project conditions. This intersection operates at LOS F during both the 10-year background and project

conditions and has a 1.1 second increase in delay. During the background conditions and project conditions under both the 5-year and 10-year scenarios, this intersection operates at LOS F. There is a 3.3 second increase in delay between the 5-year scenarios and a 7.5 second increase in delay between the 10-year scenarios. At the intersection of Monterey Street and East Market Street, the PM peak hour of network traffic operates at LOS F during the 5-year and 10-year background and project scenarios. From the 5-year background to the 5-year project, there is no increase in delay and from the 10-year background to 10-year project, there is only a 1.6 second increase in delay.

Mitigation: **TC-3: Install traffic signal at Salinas Road and Railroad Avenue in Pajaro, and reroute MST bus routes as needed to avoid congestion at Salinas Road and West Market Street.**

According to the 2005 Monterey County Regional Transportation Plan, the threshold of significance for traffic LOS is “an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)”. As outlined above, the increases in delay at the study intersections that are already operating at unacceptable levels of service are not significant in comparison to existing volumes.

In addition, increases in delay resulting from bus route realignments are considered to be categorically exempt under CEQA Section 15301(c).

After
Mitigation *Less than Significant*

Implementation of Mitigation Measure TC-3 would reduce impacts resulting from increased traffic volume by creating gaps in traffic flows to facilitate traffic exiting the station site and other businesses along Salinas Road. Furthermore, the intersections are currently operating at unacceptable levels of service; the proposed project would not significantly increase traffic volumes beyond their current conditions.

Mitigation: No mitigation is necessary.

IMPACT: **TC-4: Will the Project create an inconsistency with policies concerning roadway systems set forth in the General Plans for the City of Salinas and Monterey County?**

Analysis: *No Impact, LPA, Alternate Castroville Site*

The project is consistent with the Regional Transportation Plan, the Castroville Draft Community Plan and City of Salinas plans for the Salinas Intermodal Transportation Center.

Mitigation: No mitigation is necessary.

IMPACT: TC-5: Will the Project create the demand for public transit service above that which is provided, or planned to be provided?

Analysis: *Less than Significant*, LPA, Alternate Castroville Site

MST and METRO. Table 3.14-7 indicates the projected number of Caltrain riders using MST or METRO buses to access or depart the three Caltrain stations located in Monterey County. The projected volume of Caltrain riders using local buses to access or depart the stations is not projected to significantly impact local buses serving the three stations. In addition, to existing service, Monterey-Salinas Transit (MST) is going to increase frequency of service on Routes 20, 41 and 21, provide additional service on Routes 28 and 29 and extend service on Route 23.

Table 3.14-7

2010 Passengers Arriving Via Bus

Station	Boarding Passengers	Percent Arriving via Bus	Number of Bus Riders	Peak Hour Bus Riders
Pajaro	542	5%	27	16
Castroville	140	7%	10	6
Salinas	1049	15%	157	94

Valley Transportation Authority. There are no significant adverse impacts expected on the existing transit system as a result of the proposed project. The Metropolitan Transportation Commission (MTC) expressed concern regarding commuters overloading existing shuttles operating out of Santa Clara County Caltrain stations. According to Steve Fisher from the Valley Transportation Authority (VTA), no capacity versus ridership problems exist on any of these shuttles. Mr. Fisher said that there is room to accommodate the commuters from the Monterey County area on these existing shuttles.

Mitigation: No mitigation is necessary.

IMPACT: TC-6: Will the Project disrupt or interfere with existing or planned public transit services or facilities?

Analysis: *No Impact*, LPA, Alternate Castroville Site

MST's existing downtown Salinas Transit Center has reached its design capacity. The Salinas ITC expansion will increase the capacity of this transit center by 50 percent.

Mitigation: No mitigation is necessary.

IMPACT: TC-7: Will the Project create an inconsistency with policies concerning transit systems set forth in the General Plans for the City of Salinas and Monterey County?

Analysis: *No Impact*, LPA, Alternate Castroville Site

The project is consistent with Monterey County and City of Salinas general plan policies for transit systems.

Mitigation: No mitigation is necessary.

IMPACT: TC-8: Will the Project disrupt or interfere with existing or planned bicycle or pedestrian facilities?

Analysis: *No Impact*, LPA, Alternate Castroville Site

There are no significant adverse impacts expected on the existing bicycle and pedestrian system as a result of the proposed project. The project and related investments will improve bicycle and pedestrian systems serving the three station areas.

In Pajaro Valley, a sidewalk will be installed as part of the project along the entire frontage of the project site. This sidewalk will benefit both Caltrain users and the community.

In Castroville, a grade separated pedestrian and bicycle crossing under the Union Pacific Railroad tracks is proposed as part of the project at Castroville Site No. 2. This crossing will be the centerpiece of a trail system that will greatly benefit students traveling to the North County High School at 13990 Castroville Boulevard. This school has a capacity of 1,650 students, many of whom walk or ride their bicycles to school on a daily basis. This crossing will facilitate a safer trip to school for the students who travel via this route.

In Salinas, the safety of the pedestrian crossing of West Market Street at North Main Street will be improved by removing the southbound to westbound free right-turn for vehicles and narrowing the crossing distance. This safety improvement is not part of the Caltrain extension project, but benefits the ITC expansion.

Mitigation: No mitigation is necessary.

IMPACT: TC-9: Will the Project create an unmet need for bicycle or pedestrian facilities?

Analysis: *Less than Significant*, LPA, Alternate Castroville Site

The project will generate pedestrian and bicycle movement along Salinas Road in Pajaro, Benson Road in Castroville, West Market Street and Lincoln Avenue in Salinas, and roadways leading to these facilities. Sidewalks are generally available and/or motorized vehicle traffic volumes are very low on these local streets.

Mitigation: No mitigation is necessary.

IMPACT: TC-10: Will the Project create an inconsistency with policies related to bicycle or pedestrian systems in the General Plans of the City of Salinas and Monterey County?

Analysis: *No Impact*, LPA, Alternate Castroville Site

The Project will provide bicycle lockers and storage spaces at all station locations. The project will also provide sidewalks fronting and/or leading to the stations from the adjacent street network. The project will additionally provide traffic signals in Pajaro at Railroad Avenue (after mitigation) and in Salinas at Lincoln Avenue to aid pedestrian/bicycle crossings of Salinas Road in Pajaro and West Market Street in Salinas.

Mitigation: No mitigation is necessary.

3.14.8 CUMULATIVE IMPACTS

IMPACT: TC-C1: Will the Project have the potential to have a cumulative impact on traffic and circulation?

Analysis: *Less than Significant*, LPA, Alternate Castroville Site

In Pajaro Valley, the proposed commuter rail station is projected to generate 564 additional daily vehicular trips in the 5-year, two train scenario and 1,128 additional daily trips in the 10-year, four train scenario. One hundred sixty-nine (169) of those trips will occur during each of the AM and PM station peak hours in the 5-year scenario and 338 will occur during each of the station peak hours in the 10-year scenario. Total parking supply designed for the Pajaro Valley station will meet all of the short-range demand and 91% of the long-range demand.

The signalized intersection of Porter Drive at San Juan Road is not significantly impacted by the project.

The stop-controlled approach of Railroad Avenue to Salinas Road operates at LOS F during the evening peaks under Baseline, Background and Project Conditions. While the project will add some volume to this intersection and slightly impact their operations, it is not projected to have a significant adverse impact on traffic operations. Nevertheless, the project proposes to install a traffic signal at this location to ease traffic operations at Station Driveway 1.

At the stop-controlled approach of Lewis Road to Salinas Road, traffic operations take place at acceptable levels of service in all periods.

At Driveway 1, the station's northernmost access point, traffic exiting the station is projected to encounter significant evening-peak delay during the ten-year scenario. This approach will be stop-controlled and will accommodate left turns out of the driveway, resulting in delays for southbound exiting traffic. Northbound exiting traffic should not be significantly delayed. This situation will be mitigated through the installation of traffic signal control at Railroad Avenue which will create gaps in southbound traffic flows. Driveway 2, which will be right-in/right-out only for the section of Salinas Road adjacent to the driveway, is not projected to experience delays during any of the peak periods.

In Castroville, the proposed commuter rail station is projected to generate 204 additional daily vehicular trips in the 5-year scenario and 408 additional daily trips in the 10-year scenario. Sixty-one (61) of those trips will occur during each of the AM and PM station peak hours in the 5-year scenario and 123 will occur during each of the station peak hours in the 10-year scenario. All study-area intersections are projected to operate at acceptable levels of service under all scenarios. Therefore, the project will not have a significant adverse impact on traffic operations at any of the study intersections during any of the peak periods. The total parking supply planned for the Castroville station will be phased to meet demand, both in the short- and long-term.

The signalized intersection of SR 156 and Castroville Boulevard operates at LOS B and C under Baseline Conditions, with excess capacity during both morning and evening peaks. It is projected to continue to operate at these levels under both 5-year and 10-year background scenarios during all peak periods except for the 10-year Background scenario during the PM peak hour of network traffic. Under both 5-year and 10-year project scenarios, operations are projected to continue at Baseline levels during all periods.

The stop-controlled approach of the station driveway to Castroville Boulevard operates at LOS A and B during the Baseline and both

background conditions during all peak periods. Under the 5-year and 10-year project conditions, this movement is projected to continue to operate acceptably and with excess capacity during all peak periods.

In Salinas, the proposed commuter rail station is projected to generate 876 additional daily vehicular trips in the 5-year scenario and 1,752 additional daily trips in the 10-year scenario. Two hundred sixty-three (263) of those trips will occur during each of the AM and PM station peak hours in the 5-year scenario and 526 will occur during each of the station peak hours in the 10-year scenario. The total parking supply planned for the Salinas station will be sufficient to accommodate projected demand.

The signalized intersection of Lincoln Avenue at West Market Street operates at LOS B under Baseline Conditions. Under the 5-year Background conditions, the AM peak hour of network traffic declines to LOS C. In the 10-year Background scenario, both the AM and PM peak hour of the roadway network are projected to operate at LOS C. During the 5-year Project conditions, the intersection LOS during both the AM peak hour of the roadway network and the PM peak hour of the station are projected to be LOS D. The intersection is expected to operate at LOS C during the PM peak hour of the adjacent roadway network. Selection of Design Option 18, with parking supplies dispersed and serviced by four egress points, will mitigate this traffic condition.

The Salinas Street at West Market Street intersection operates at LOS A and B during Baseline, 5-year and 10-year Background Conditions of both the AM and PM peaks of station operations. The intersection operates at LOS D during the AM and PM peak hours of network traffic under Baseline Conditions. Under 5-year Background Conditions, the AM peak of the network declines to LOS E and the PM peak of the network declines to LOS F. Under 5-year Project Conditions, the intersection operates at LOS A during the AM peak hour of station operations, LOS E during the AM peak hour of the adjacent roadway network, LOS C during the PM peak hour of station operations, and LOS F during the PM peak hour of the roadway network. The roadway network AM and PM peak hours' operations under the 10-Year Project Scenario are at a LOS F, while the intersection operates at LOS B and LOS D during the AM and PM station peaks, respectively.

The intersection of Rossi Street with North Main Street operates at LOS B or C during all Baseline peak periods except the network evening peak, when it operates at LOS D. This intersection is projected to continue this level of operations during the five-year background and project conditions during all peak periods. During the ten-year background and project conditions, the network evening peak level of service is projected to decline to LOS D and E, respectively. Because the level of service and average delay remain the same across background and project conditions,

the decline is not attributable to the addition of project-generated traffic volumes.

Field observation of existing traffic operations during the network evening peak indicates that traffic queues spill back from the intersection of Rossi Street and North Main Street to adjacent intersections, including the Salinas Street/West Market Street and Monterey Street/East Market Street intersections as well as the Lincoln Avenue at West Market Street intersection. At times, this area of downtown Salinas appears to be gridlocked. Because such conditions reduce the traffic volumes entering and exiting the study intersections, level of service analysis (based on the hourly traffic volumes) can falsely indicate acceptable operations.

Analysis undertaken for the City of Salinas by Higgins Associates indicates that improvements to the intersection of Rossi Street with North Main Street coupled with traffic signal system interconnect will alleviate these spillback conditions. However, this analysis assumes existing geometry for all conditions.

The overall results of this traffic impact analysis indicate that traffic generated by the proposed Caltrain stations will not cause a significant decline in operating conditions on the adjacent street networks. Operations in most cases are not projected to diminish at all. In the locations and hours where project-related declines are projected, the resulting levels of service will remain within the range of acceptable operations and delays.

Mitigation: No mitigation is necessary.

Implementation of the recommended program would mitigate the proposed project's traffic and circulation impacts to a level considered less than significant. No additional mitigation is proposed.

3.14.9 CONCLUSION

With implementation of the above-referenced mitigation measures, traffic and circulation impacts resulting from the proposed project and alternatives would be less than significant.

3.14.10 REFERENCES

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4.0 MANDATORY ENVIRONMENTAL ANALYSIS

4.1 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Section 21100(b)(2)(B) of CEQA requires that an EIR identify any significant irreversible changes that would result from project implementation. Section 15126.2(c) of CEQA provides guidance as to what sorts of changes might be considered irreversible. Such changes include use of nonrenewable resources, commitment of future generations to similar uses, and environmental accidents that could occur as a result of the project.

The proposed project would involve construction activities that commit non-renewable resources including fuels, construction materials, and land. Once constructed, project facilities would continue to use energy. The area of land that would be used by the project is 35.56 acres in the LPA, and 31.78 acres using the Alternative Site #1 in Castroville instead of Site #2.

The California Environmental Quality Act notes that environmental accidents can cause irreversible damage, and the project will result in the construction of industrial facilities that may use hazardous materials for train operations and station upkeep, and may generate hazardous waste. However adequate procedures are in place to guard against accidental releases of hazardous materials or hazardous waste. Measures to protect against these hazards are detailed in Section 3.6, Hazardous Materials and Hazardous Wastes.

4.2 UNAVOIDABLE SIGNIFICANT ADVERSE EFFECTS UNDER CEQA

Section 2100(b)(2)(A) of CEQA requires that an EIR identify any significant environmental effects that cannot be avoided if the project were implemented. Significant unavoidable impacts are identified in Section 3 (Affected Environment, Consequences, and Mitigation Measures) of this document, as those impacts that remain significant after implementation of mitigation. Although the project has the potential to result in a number of significant environmental impacts, most of these can be avoided through the adoption of appropriate mitigation measures that will reduce those effects to a less than significant level.

Significant unavoidable impacts of the project are the following:

- There are no significant unavoidable impacts resulting from implementation of the proposed project.

Significant cumulative impacts are also identified for the following issues:

- There are no significant cumulative impacts resulting from implementation of the proposed project.

4.3 CUMULATIVE EFFECTS

Cumulative impacts are defined as “two or more individual effects which, when considered together are considerable or which compound or increase other environmental impacts” (CEQA Guidelines Section 15355). Section 15130 of the CEQA Guidelines states that an EIR must discuss cumulative impacts when they are significant. In the case of the proposed project, cumulative impacts could result from the project impacts in combination with those from growth in the neighboring areas. The analysis of cumulative impacts of the project and surrounding local and subregional development are presented in Section 3 (Affected Environment, Consequences, and Mitigation Measures) under each issue area. If significant cumulative impacts are identified, mitigation measures have been recommended, which, when implemented, will reduce impacts to less than significant levels.

The following projects have been included in the cumulative impacts analysis:

- **Caltrain Extension.** The Monterey County General Plan 2001 Update indicates the general growth, type of development, and density proposed for the North County Area, which includes the Pajaro and Castroville sites. One of the proposed policies, namely to facilitate Caltrain rail passenger service to Pajaro and Castroville to include cumulative projects was analyzed in the General Plan Update EIR.

Consistent with the Extension of Caltrain Commuter Service to Monterey County 2000 Business Plan, two round trips will initially be extended south from Gilroy to Salinas. As funding permits and patronage levels warrant, service will be expanded to four round trips per day within ten years. Ultimately, facilities should be designed to accommodate—or expand to accommodate—six peak-period round trips per day as commute service is increased between San Jose and Gilroy.

San Benito County may also consider an extension of Caltrain service from Gilroy to Hollister. This service would operate over the Coast main line for two miles between Gilroy and Carnadero Junction, then over the Hollister branch line. Initially, two round-trip trains may be considered, expandable to four trains each way as funding permits and patronage warrants. Operation of a rail shuttle service between Hollister and Gilroy may also be considered independent from Caltrain service.

- **Amtrak.** Amtrak currently operates the Coast Starlight service over the Coast mainline between Oakland, San Jose, and Los Angeles. The southbound trip stops at Salinas at 11:48 a.m., while the northbound trip stops at 6:36 p.m. The Coast Starlight runs nonstop between Salinas and San Jose (Diridon Station). During FY 2001, 493,683 passengers rode the Coast Starlight, down two percent from the previous year. Over 24,000 passengers used the Salinas Intermodal Transportation Center to board or disembark from Amtrak trains and Thruway motor-coaches.

The Coast Rail Coordinating Council is proposing to increase passenger rail service over the Coast main line between San Francisco and San Diego. A “Coast Daylight” service is planned that would stop in Gilroy and Pajaro in addition to Salinas and San Jose.

The proposed schedule would run these trains approximately two hours earlier in the day than the Coast Starlight, passing Salinas southbound at approximately 10:24 in the morning and northbound at 4:26 in the afternoon.

- **Monterey and San Francisco Intercity Service.** In addition to these services, Amtrak West, the State Division of Rail, and TAMC are studying the feasibility of initiate intercity passenger rail service between Monterey and San Francisco. This service would utilize the Coast main line and the Monterey branch line, which connects with the main line at Castroville. Within Monterey County, stops could include Pajaro, Castroville, Marina, Seaside, and Monterey.
- **Capitol Corridor Train Service.** Amtrak operates the Capitol Corridor Intercity Rail Service between San Jose (Diridon Station) and Auburn, California. On weekdays, nine round trips are operated. Amtrak also provides connecting bus services to Monterey County daily. Each major area of Monterey County—the Monterey Peninsula, Salinas, or south county cities—is served by this connecting bus service. Salinas receives connecting bus service to four of the nine Capitol Corridor trains, while Monterey receives connecting service to three of the trains. The Transportation Agency for Monterey County has begun discussions with the Capitol Corridor staff and members of the Joint Powers Board to extend rail service to Monterey County. No further programming information is available at this time.
- **Monterey/Santa Cruz Shuttle Service (Wharf-to-Wharf or Around the Bay Service).** Monterey County and Santa Cruz County may, in the future, work toward initiating passenger rail service between Santa Cruz and Monterey. Studies undertaken in the late 1990s proposed that service operate over the Santa Cruz branch line, the Coast main line, and the Monterey branch line. (The Santa Cruz branch line joins the Coast main line at the Pajaro rail yards, also known as the Watsonville Junction.) The initial service would have one train departing from each end point every 3–4 hours and provide four round trips per day. As the service becomes established, hourly departures would be provided, yielding approximately 12 round trips daily. Additional half hour frequencies could also be included between end points and adjacent higher density localities. The service was envisioned to begin with five stations in Santa Cruz County and three in Monterey County—Pajaro Valley, Castroville, and Monterey/Seaside/Fort Ord.
- **Monterey-Salinas Transit.** Monterey-Salinas Transit (MST) operates two routes, Route 28 Watsonville and Route 29 Watsonville, which pass by the proposed Pajaro Valley Rail Station on Salinas Road. A third route, 27 Watsonville–Monterey, could potentially be rerouted to serve this station as well. Monterey-Salinas Transit also services Castroville via routes 27 and 28. These routes are currently aligned along SR 183–Salinas Road and Merritt Street, passing through downtown Castroville. The following MST routes pass the Salinas Amtrak Station on Market Street:

- 28 Watsonville
- 29 Watsonville
- 44 Westridge
- 45 East Market–Creekbridge
- 46 Natividad

These routes also serve the Salinas Transit Center, which is located three blocks south of the passenger rail station on Gabilan Street between Lincoln Avenue and Salinas Street. Six additional MST routes serve this nearby Salinas Transit Center. These routes are:

- 21 Salinas–Monterey via Highway 68
- 23 Salinas-King City
- 39 Laguna Seca-Salinas
- 41/42 East Alisal–Northridge/Westridge
- 20 Salinas–Monterey via Marina
- 43 Memorial Hospital

All 11 of these MST routes, plus others to be identified, may eventually serve the Salinas passenger rail station if the Salinas Transit Center is relocated to the Intermodal Transportation Center site.

- **Santa Cruz Metropolitan Transit District.** SCMTD, otherwise known as METRO, operates 42 bus routes within Santa Cruz County. Seven of these routes serve Watsonville as local circulator routes or as connecting routes to other parts of the county. All of these routes serve the Watsonville Transit Center, located at 475 Rodriguez Street. Routes serving Watsonville are:

- 69/69A/69W/69N Capitola Road/Cabrillo/Watsonville
- 71 Watsonville–Santa Cruz;
- 72 Corralitos;
- 74 Ohlone Parkway/Rolling Hills
- 75 Green Valley;
- 76 Corralitos/Buena Vista;
- 79 East Lake; and,
- 91 Commuter Express.

One or more of these routes may be extended to the Pajaro Valley Rail Station; or a shuttle route may be initiated between the rail station and the Watsonville Transit Center.

- **Amtrak Thruway Motocoach.** As mentioned under the Capitol Corridor Train Service, Amtrak operates connecting bus service between San Jose (Diridon Station) and Salinas, with continuing service to Monterey and Carmel. Southbound, four connecting bus trips are offered to Salinas. Three of these trips

continue to Monterey. Additionally, a connecting bus meets the Coast Starlight train, providing service to Monterey and Carmel.

Significant cumulative noise impacts were identified in the analysis of the project. However, with regional implementation of the mitigation measure to reduce noise levels from trains such as limiting use of horns, noise impacts would be reduced to less than significant levels. The proposed project would not result in other significant cumulative impacts or impacts would be less than significant.

4.4 GROWTH INDUCEMENT

Growth inducement is defined by the CEQA Guidelines as the fostering of economic or population growth, or the construction of new housing. Growth inducement may result from direct employment, population, or housing growth; secondary or indirect growth; or provision of new infrastructure that removes obstacles to population growth.

The project is located in both urban and rural areas, surrounded by commercial development or farmland and county parcels. With the development of the proposed station facilities, construction of a new commuter rail passenger transportation infrastructure would directly foster economic and population growth. The project could help to accommodate the projected population of the City of Salinas and Monterey County General Plan who reside in these areas but work elsewhere by providing efficient public transportation options.

4.4.1 Indirect Impacts

The proposed project could have an indirect affect on the local population near the proposed stations. Beneficial impacts to community cohesion and quality of life would also occur for residents and businesses near the proposed rail stations. Residential property values could potentially increase slightly near transit stations. Higher density housing and mixed use developments would most likely occur near rail stations, which could provide additional affordable housing units to the communities.

Employment growth at the proposed station sites would result mostly from a redistribution of existing employment. Access to regional jobs and educational and entertainment opportunities would increase for residents living near proposed rail stations, including environmental justice populations.

4.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The California Environmental Quality Act requires the identification of an Environmentally Superior Alternative; that is, the alternative that has no significant effect or has the least significant effect on the environment. For reference, significance is determined based on substantial or potentially substantial adverse changes of any of the physical environmental conditions due to the Project. The degree of change is evaluated against existing environmental conditions.

Reasonable project alternatives have been evaluated and analyzed to determine their feasibility and impacts in comparison to the Project. The Project results in more

significant impacts or impacts that result in a higher level of disturbance, than any of the alternatives. However, it also meets all of the goals established by TAMC.

Because the No Project Alternative assumes that no development of the project would occur, this alternative is the least environmentally damaging. However, the No Project Alternative would not allow the applicant to achieve their objectives for this project.

The Alternate Castroville site would have similar impacts to the LPA. However, due to the more urban location of the station in the Alternative Castroville Site, this alternative would not be expected to reduce any of the significant cumulative impacts.

Based on the analysis in previous sections of the EA/EIR, the proposed project is the environmentally superior alternative among the alternatives. In addition, it results in impact reductions to air quality, socioeconomics, and traffic and transportation. Therefore, the proposed project is considered the environmentally superior alternative.

5.0 ALTERNATIVES

5.1 INTRODUCTION

CEQA requires a discussion of alternatives to the project to inform public decision-makers of the various environmental impacts associated with each alternative. This information allows decision-makers to formulate a reasoned judgment on each alternative to determine which is the environmentally superior alternative. State CEQA Guidelines Section 15126(d) provides the following description of the requirements of an Alternatives section in an EIR:

Alternatives to the Proposed Action. Describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.

This section of the EIR discusses three alternatives to the Project, including the No Project Alternative, and also provides a discussion of alternatives that were considered and rejected based on the criteria established through project scoping.

5.2 DEVELOPMENT OF ALTERNATIVES

The alternatives were developed to satisfy the requirements of CEQA and the CEQA guidelines. Section 15126 of the CEQA guidelines require and EIR to "describe a range of reasonable alternatives to the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project." A "No Project" alternative should be included and should describe the impacts associated with existing conditions, as well as impacts that would be reasonable expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. The alternatives analyzed in this EIR include the following:

- No Build (No Project);
- Locally Preferred Alternative, which includes Pajaro Passenger Station at Site #1, Castroville Site #2, Salinas Layover Yard Facility at Site #2, and Salinas ITC. The ITC includes two alternatives for parking (Configuration 17 and Configuration 18).
- Alternative Castroville Site Alternative. This alternative has exactly the same site mix as the Locally Preferred Alternative (Pajaro Passenger Station at Site #1, Salinas Layover Yard Facility at Site #2, and Salinas ITC Expansion Configurations 17 or 18) with the exception of the inclusion of an alternate Castroville Passenger Station site

To ensure that a reasonable range of alternatives will be considered under CEQA, alternatives are being considered to represent a wide spectrum of potential solutions. The CEQA guidelines were followed in the development of site selection criteria and applied those criteria to the project as a whole, for the various alternative sites. Our goal was to describe the facts and rationale by which rejected sites were deemed infeasible. Elements from the public scoping meeting and Notice of Preparation were taken into account during the development of the above rationale and selection criteria.

Project scoping activities have been ongoing since 1996. From June 1996 to June 1998, the City of Salinas sponsored investigations of development options for a Salinas Intermodal Transportation Center to be developed at the site of the existing Amtrak Station. Phase 1 of the transportation center, consisting of bus layover bays, surface parking, site landscaping and lighting, was subsequently constructed and placed into operation in 1999.

In 1997, the City of Watsonville prepared a *Draft Pajaro Valley Station Project Study Report*, in cooperation with Monterey County, TAMC and the Santa Cruz County Regional Transportation Commission. While not finalized, this draft Project Study Report (PSR) identified a potential site location and set of program requirements for this station.

During the time period from 1998 to 2000, these program requirements and opportunities for adjacent site development were further refined and explored by a Monterey County–sponsored *Pajaro Railyards Area Feasibility Study*. This study, as well as the draft PSR, sited the Pajaro Valley Station adjacent to the former Southern Pacific Passenger Depot, accessed from Salinas Road.

In 2000, TAMC sponsored the preparation of the *Extension of Caltrain Commuter Service to Monterey County Business Plan*. The business plan considered, but did not thoroughly evaluate, alternative sites for stations at Pajaro and Castroville and a layover yard in Salinas.

Following the completion of the business plan, a Pajaro Valley Station Working Committee of public agency staff met regularly during 2001 to discuss site location alternatives and program requirements.

Work was also undertaken by the City of Salinas to identify a site for expanding the parking supply at the Salinas ITC. Conceptual site plans were developed for a parking facility adjacent to the Bataan Memorial Park, but these plans encountered public opposition.

Selection Criteria (Program Requirements)

Based on the aforementioned background studies and discussions with the Project Development Team, a set of basic program requirements was identified for each station. These program requirements are listed in Table 5.1 and were used to generally size the alternative station development sites and component elements of the PSR.

Table 5.1

Monterey County Caltrain/Amtrak Station Program Requirements

	Pajaro	Castroville	Salinas
Caltrain			
Short-range boardings	274	100	524
Target boardings	500	200	1000
Amtrak stop	Yes	Yes	Yes
Parking Spaces			
Short-range requirement	200–225	90	420
Target requirement	400	180	800
Bus Berths	Yes	Yes	Yes
Taxi	Yes	No	Yes
Station Building	No	No	Yes
Train Platform	New	New	Reconstructed
Handicapped Access	Lift	Lift	Lift
Shelters	Yes (2)	Yes (2)	Canopy
Restrooms	Yes	Yes	Yes—Retrofit
Benches	Yes	Yes	Yes
Public Address/VMS	No	No	Yes
Information Display	Kiosk	Kiosk	Kiosk
<i>Source: Parsons (2002)</i>			

5.3 ALTERNATIVES CONSIDERED AND REJECTED

The following sites were analyzed based on the selection criteria (program requirements) in the PSR.

Pajaro Valley Station (Watsonville Junction) Siting Alternatives

Two sites were identified for the Pajaro Valley Station—both in close proximity to the UPRR Watsonville Junction. Site 1 is adjacent to Salinas Road, and Site 2 is adjacent to Lewis Road, which intersects with Salinas Road just south of Watsonville Junction.

To accurately gauge the potential parking supply yields, track and signaling requirements, and costs associated with each of the two sites, conceptual site layouts were prepared, which in turn were used to estimate quantities for order-of-magnitude cost estimates.

Site 2 along Lewis Road is less complex from a station development perspective, as less track, turnout, and signaling work would be required. This conceptual design features a platform adjacent to one of the two main line tracks—similar to all Caltrain stations south of Tamien between San Jose and Gilroy. Future interface with potential passenger rail service on the Santa Cruz branch line would be more complex, however, requiring several additional turnouts for a direct track connection or a pedestrian overcrossing linking two separate boarding platforms as illustrated on Figure 3 of the PSR.

To aid with evaluating the pros and cons of these two station sites, “Station Site Evaluation Criteria” were developed, as described in Table 5.2 and qualitatively measured in Table 5.3. For these conceptual designs, capital costs—exclusive of right-of-way—were estimated as \$8.25 million for Site 1 and \$5.0 million for Site 2, as summarized in Table 5.4. Additional cost detail is provided in the Project Study Report (Parsons 2002).

Prior to selecting a station site based on this comparative information, the conceptual site plans were reviewed with UPRR representatives. These representatives stated that UPRR has adopted a business strategy that is intended to speed freight service over their entire system. A UPRR policy has therefore been implemented to avoid potential conflicts with passenger rail operations wherever possible. UPRR is therefore stipulating that new stations be located off the main line tracks, on a separate station track(s). UPRR representatives also stated a strong preference for locating passenger rail station platforms along the Pacific Coast side of the Coast main line track. No definitive rationale was provided to support this coast side station preference.

Subsequent to providing this guidance, other UPRR representatives stated that UPRR might be willing to furnish the Watsonville Junction Yard lead track for passenger rail use as a station track. A conceptual design reflecting this opportunity was therefore developed and construction costs estimated. The order-of-magnitude construction cost for this design was estimated as \$7.3 million (see Table 5.4). The slightly lower capital cost estimate associated with this design would qualitatively be characterized as “Poor.”

The conceptual design for Site 2 along Lewis Road was also updated, based on the above UPRR guidance, to add a separate station track off the mainline. This track and turnout construction raised the order-of-magnitude cost estimate to \$6.4 million, now viewed to be “Fair.”

Based on the lowered cost differential between Site 1 and Site 2, the opportunity to expand the parking supply at Site 1 in the future, UPRR’s preference for developing “coastside” station platforms, Site 1’s direct interface with the Santa Cruz branch line, and the greater accessibility of Site 1 to Salinas Road and the Pajaro community, the PDT identified Site 1 as the preferred location for station development, barring discovery of any environmental fatal flaw.

Table 5.2

Pajaro Valley Station Site Evaluation Criteria

Criterion	Description
General	
Accessibility	The accessibility of the station to and from local residential areas, employment centers, arterial streets and highways
Visibility	Visibility of station from a major thoroughfare. Visibility enhances patronage.
Safety	Safety of the station design for patrons and neighbors
Design exceptions	Non-standard features requiring exceptions from mandatory or advisory design standards
Constructability	Ease of constructing the station while maintaining existing traffic circulation and rail service
Environmental	
Land use	Measures how well the alternative conforms with existing land uses, zoning, and planned development
Rail service	The effect of the station on existing UPRR and Amtrak operations
Visual/aesthetics	Describes how the alternative fits within the existing visual character
Noise	Compares noise impacts to other station alternatives
Light	Compares light impacts to other station alternatives
Hazardous materials	Compares potential exposure to hazardous materials
Biological resources	Compare special status species/habitat impacts
Historic/cultural resources	Compares potential archaeological or historical resource impacts
Right-of-Way	
Displacements	Compares displacements including residential, commercial, and industrial
Utilities	Compares relocations of major utilities required
Costs	
Capital cost	Compares construction cost and other up-front costs to the other alternatives
Operating cost	Compares operating, maintenance and other on-going costs to the other alternatives
Construction phasing	Describes the ability to construct the station facilities in phases, to minimize short term capital cost, and add parking and other features over time as needs arise and additional capital funds become available.

Source: Parsons (2002)

Table 5.3 discloses the matrix of constraints used to rate the two alternative sites at Pajaro (Watsonville Junction).

Table 5.3

Pajaro Valley Station Site Evaluation Matrix

Criterion	Site 1: Salinas Road	Site 2: Lewis Road
General		
Accessibility	G Direct access from Salinas Road	F Access from Salinas Road via Lewis Road. The station could be connected via a pedestrian overpass to a future Amtrak station on the Santa Cruz line on the Railroad Avenue side of the rail yard
Visibility	G Station would be clearly visible from Salinas Road	P Station site is not visible from a major thoroughfare
Safety	F Station would have dedicated track, eliminating potential danger from freight trains passing through the station. Potential problems due to track curve design exception.	F No problems anticipated. Potential tendency of patrons to cross yard tracks to access station from Railroad Avenue could be deterred with a fence.
Design exceptions	P Part of station on horizontal curve; problems of visibility and space between train door and platform	G No design exceptions anticipated
Constructability	F Safety precautions such as Form B and flagging will be required	F Safety precautions such as Form B and flagging will be required
Environmental		
Land use	F Site is currently unused, except for UPRR depot building. Planning for development currently underway.	F Site is currently unused. No planned development.
Rail service	F Minimal if station track is constructed to avoid conflicts with UPRR yard traffic	G Minimal if crossovers constructed to avoid conflicts with UPRR yard traffic
Visual/aesthetics	G Station will enhance existing site	G Station will enhance existing site
Noise	G Significant impact is not anticipated	G Significant impact is not anticipated
Light	G Significant impact is not anticipated	G Significant impact is not anticipated
Hazardous materials	P Site is potentially contaminated from past railroad operations. Some excavation for station track is expected. Building demolition may expose hazardous materials.	F Site is potentially contaminated from past railroad operations, but minimal excavation will be required
Biological resources	G Significant impact is not anticipated	G Significant impact is not anticipated
Historic/cultural resources	F Station building may have status. Significant impact is not anticipated.	G Significant impact is not anticipated
Right-of-Way		
Displacements	G UPRR depot	G None
Utilities	G No significant utility relocations are anticipated	G No significant utility relocations are anticipated
Costs		
Capital cost	P High due to access road, station track, and relocation of UPRR depot	G Low
Operating cost	F High due to station track and access	G Low

Table 5.3

Pajaro Valley Station Site Evaluation Matrix

Criterion	Site 1: Salinas Road	Site 2: Lewis Road
Construction phasing	road G Parking lot could be constructed in phases	P Station site does not lend itself to future expansion.

Source: Parsons (2002)

Table 5.4 summarizes the relative costs of building the two passenger platform sites at Pajaro (Watsonville Junction). Each site (Site 1 and Site 2) have two development options (Option A and Option B). One key advantage for Site 1 is the site’s direct interface with the Santa Cruz branch line track. Site 2 along Lewis Road is less complex from a development perspective as less track, turnout and signaling work would be required. Future interface with the Santa Cruz branch line would be more complex, requiring several additional turnouts for a direct track connection or a pedestrian overcrossing linking two separate boarding platforms.

The sites and each of their two options are described below.

- Site 1-Option A would provide a 700 foot by 20 foot passenger platform and 298 parking spaces. The parking lot and bus loading area would be sited along the northern side of Lewis Road, and the entrance to the bus loading area would be located on Salinas Road. Two future development sites would also be provided along Salinas Road and near the junction of Salinas and Lewis roads. The removal of one power turnout, replacement of another and installation of two additional power turnouts would also be necessary. Furthermore, additional track would need to be installed on either side of the Pajaro passenger platform. Capital costs for this Site 1-Option A are estimated at \$8.24 million.
- Site 1-Option B would also provide a 700 foot by 20 foot passenger platform, but only 293 parking spaces. The parking lot and bus loading area would be sited along the northern side of Lewis Road, and the entrance to the bus loading area would be located on Salinas Road. One future development site would be provided along Salinas Road. The removal of one power turnout, replacement of another, and installation of one additional power turnout would be necessary. Furthermore, additional track would need to be installed near the Pajaro Station before the junction of Salinas and Lewis roads. Construction costs for this option are estimated to be slightly lower than Option A (at \$7.3 million); however, this option does not fully maximize development opportunities at the site.
- Site 2-Option A would provide a 700 foot by 20 foot platform and 266 total surface parking spaces. The parking lot and bus loading area would be developed along the southern side of Lewis Road. No future development sites would be

provided. However, a pedestrian overpass and additional future platform could be developed. No changes to the existing tracks or equipment would be needed. Estimated capital costs for Site 2-Option A is about \$5 million.

- Site 2-Option B would also provide a 700 foot by 20 foot platform and 288 parking spaces. The parking lot and bus loading area would be developed along the southern side of Lewis Road. No future development sites would be provided. However, a potential pedestrian overpass and additional future platform could be developed. The installation of two power turnouts and construction of track near the station platform would also be necessary. This option’s capital costs are estimated at \$6.4 million.

Table 5.4

Pajaro Valley Station Cost Estimate Summary

Work Description	Site 1 Option A	Site 1 Option B	Site 2 Option A	Site 2 Option B
Parking and Access	\$ 717,569	\$ 692,729	\$ 904,444	\$ 883,033
Pedestrian Grade Separation	—	—	—	—
Platform and Station Amenities	614,352	614,352	614,352	614,352
Track/Signal Improvements	3,297,430	2,865,320	1,456,600	2,178,670
Specialty Items	265,800	159,200	24,000	146,200
Mobilization	489,515	433,160	299,940	382,225
Contingencies (15%)	807,700	714,714	494,900	630,672
Construction Total	6,192,366	5,479,475	3,794,236	4,835,153
Soft Costs	2,043,481	1,808,227	1,252,098	1,595,600
Right-of-Way	—	—	—	—
Total	8,235,847	7,287,702	5,046,334	6,430,753

Note: This cost estimate does not include right-of-way costs.

Source: Parsons (2002)

Based on the lowered cost differential between Site 1 and Site 2, the opportunity to expand the parking supply at Site 1 in the future, UPRR’s preference for developing “coastside” platforms, the existing direct interface of Site 1 with the Santa Cruz branch line track, and the greater accessibility of Site 1 to Salinas Road and the Pajaro community, Site 1 has been identified as the preferred location for station platform development (Parsons, 2004).

Castroville Station Site Alternatives

Two sites were identified for the Castroville Station—one to the south of State Route 156, and the other to the north. The location of these sites relative to the surrounding community is illustrated in Figure 6 of the PSR.

Site 1 lies adjacent to Del Monte Avenue and is surrounded by industrial land uses. Historically, this site was the location of the Castroville Depot, serving both the Coast main line and the Monterey branch line. The depot was removed years ago and UPRR has recently removed the Monterey branch line turnout and track connection. TAMC and the State Department of Transportation Division of Rail are actively working to restore this track connection and upgrade the branch line for operation of intercity passenger rail service to San Jose and San Francisco.

Site 2 is situated approximately one-mile to the north of Site 1 on lands currently used for agricultural production. Downtown Castroville and the principal concentration of residential development lie to the west of this site.

To accurately gauge the potential parking supply yields, track and signaling requirements, and costs associated with each of the two sites, conceptual site layouts were prepared. These conceptual site layouts are illustrated on Figure 7 and 8 of the PSR.

The Site 1 conceptual design is very straightforward, as it takes advantage of an existing street—Del Monte Avenue—for all site parking access and circulation. However, adjacent industry uses the roadway for parking truck trailers along the easterly curb.

In addition to the parking supply to be accessed from Del Monte Avenue, Figure 7 of the PSR illustrates the location of an adjacent parcel that could be acquired to expand the parking supply for this station. This adjacent parcel is currently fully utilized for “warehousing” agricultural processing supplies.

Site 2 affords a much larger space to develop a passenger rail station. Parking supplies and site access roads could be developed on the Coast (west) side of the main line or on the east side of the tracks. Lands on both sides of the track are currently used for agricultural (artichoke) production. Concerns expressed during the preparation of the Caltrain Extension Business Plan regarding farmland conversion have been resolved by County land use policy.

Development of a station on this site affords opportunity to provide a larger parking supply than would be available at Site 1. Construction of an access roadway would be required, as well as pedestrian grade separation or at-grade track crossing. Due to the larger supply of parking, access roadway construction and a grade-separated pedestrian crossing (assumed), development of a station on Site 2 was estimated to cost approximately twice (\$4.9 million) that of Site 1 (\$2.5 million).

Additional, qualitative measurements of alternative site performance are recorded in Table 5.5, Castroville Station Evaluation Matrix.

Table 5.5

Castroville Station Site Evaluation Matrix

Criterion	Site 1: Del Monte Avenue	Site 2: SR 156
General		
Accessibility	P Patrons would use Salinas Road and either Wood or Blackie Street to reach the station	G Easy access from SR 156 via Collins Road/Castroville Boulevard.
Visibility	P Station would not be visible from a major thoroughfare	G Station would be visible from SR 156
Safety	G No problems anticipated	F Potential tendency for patrons to access the station from the west by crossing the tracks rather than use the pedestrian overpass. A fence would be installed to deter this move.
Design exceptions	G No design exceptions anticipated	G No design exceptions anticipated
Constructability	F Station is on active main track. Safety precautions such as Form B and flagging will be required.	F Station is on active main track. Safety precautions such as Form B and flagging will be required.
Environmental		
Land use	F Station site is in an industrial area. The site access road is currently used by nearby businesses for parking of vehicles. Site of future parking expansion is currently used as a storage yard. Planned development not known.	F Station site is currently in agricultural production. Level of significance is unknown.
Rail service	P Station is on main track. Coordination of train schedule with UPRR and Amtrak will be required.	P Station is on main track. Coordination of train schedule with UPRR and Amtrak will be required.
Visual/aesthetics	G Station will enhance the site, which is in an industrial area	P Station will displace crops
Noise	G Significant impact is not anticipated	G Significant impact is not anticipated
Light	G Significant impact is not anticipated	G Potential impacts on the neighborhood west of the station. Impacts could be mitigated
Hazardous materials	F Site is potentially contaminated from past railroad operations, but minimal excavation will be required.	G Station site is currently farmland – no hazardous materials anticipated
Biological resources	G Significant impacts are not anticipated	F Station site is potentially habitat area
Historic/cultural resources	G Significant impacts are not anticipated	G Significant impacts are not anticipated
Right-of-Way		

Criterion	Site 1: Del Monte Avenue	Site 2: SR 156
Displacements	F None except parking by neighborhood businesses	G None
Utilities	G No major utility relocations anticipated. Existing fiber optic line will not be disturbed.	G No major utility relocations anticipated.
Costs		
Capital cost	G Low	P High
Operating cost	G Low	F Medium
Construction phasing	G Station and adjacent parking can be constructed first, and parking expanded later, when needed	F Station site does not lend itself to phased construction

Source: Parsons (2002)

Prior to selection of a station site based on this comparative information, the conceptual site plans were reviewed with UPRR representatives. As with the Pajaro Valley Station design concepts, UPRR officials stipulated that a separate station track off the main line would be required for UPRR acceptance of the Caltrain extension service proposal and development of a passenger rail station at Castroville. UPRR also stipulated that as the proposed intercity passenger rail service between the Monterey Peninsula and San Francisco could stop at the Castroville Caltrain station, the Monterey branch line would need to be connected to the Castroville station track rather than the main line, as depicted in Figure 7 of the PSR. This UPRR stipulation effectively removed Site 1 from further consideration, as the branch line track would necessarily utilize right-of-way earmarked for the station platform and parking supply accessed from Del Monte Avenue.

Shifting the Site 1 platform and parking northward to the lands identified for parking expansion was considered but not pursued in depth, as this property is heavily utilized to support adjacent food-processing industries.

UPRR stipulated that a station at Site 2 would be acceptable provided that a separate station track linked to the Monterey branch line was provided and that the station platform was situated on the Coast (west) side of the main line track. Three design options (Options A, B, and C) were subsequently developed to respond to these UPRR requirements, as illustrated on Figures 9, 10, 11, and 12 of the PSR. Figure 12 in that report illustrates the proposed station track connection to the Monterey branch line and is common to all design options. A description of each of the three options is presented below.

- Option A would provide a 700 foot by 20 foot platform and 341 parking spaces. The parking lot and bus loading area would be located along the east side of the UPRR tracks with access from the intersection of Collins Road and Castroville Road. The platform would be located on the west side of the tracks with access provided by a pedestrian undercrossing below the tracks. A pedestrian trail would also be provided from Benson Road west of the tracks to the platform. One new power turnout with new track would be constructed along the existing railroad tracks for access from the passenger platform.

- Option B would provide a 700 foot by 20 foot platform and 357 parking spaces. The parking lot and bus loading area would be located on the east side of the UPRR tracks adjacent to Collins Road. Access to the parking lot would be from Collins Road. A pedestrian trail would be constructed from the intersection of Collins Road and Castroville Road, as well as from two other points from the parking lot to the pedestrian undercrossing. The platform would be located on the west side of the tracks with access provided by a pedestrian undercrossing below the tracks. A pedestrian trail would also be provided from Benson Road west of the tracks to the platform. One new power turnout with new track would be constructed along the existing railroad tracks for access from the passenger platform.
- Option C would provide a 700 foot by 20 foot platform and 351 parking spaces. The platform, parking lot and bus loading area would all be located on the east side of the UPRR tracks adjacent to Collins Road. Access to the parking lot would be from Benson Road. A separate pedestrian overcrossing would be constructed from Collins Road over the tracks to Benson Road. One new power turnout with new track would be constructed along the existing railroad tracks for access from the passenger platform.

Order-of-magnitude capital costs for these three design options are listed in Table 5.6 along with the originally estimated costs for Site 1 and Site 2. Development of a separate station track, turnouts and signaling adds approximately \$4 million to the overall construction cost for this station.

During selection of a station footprint from conceptual design options 2A, 2B and 2C, PDT members did not favor option 2C, which placed the parking supply and access roadway on the Coast (west) side of the main line track. While this option would situate the platform and parking supply on the same side of the station track, an obvious and significant benefit, this advantage was outweighed by traffic congestion currently experienced at the intersections of the State Route 156 off-ramp terminals with Merritt Street (SR-183), which serves as Castroville's central artery. PDT members familiar with local traffic patterns also felt that station access for drive-access commuters from the Monterey Peninsula would be more direct and less congested via the signalized intersection of Castroville Boulevard with SR-156.

As design options 2A and 2B occupy similar footprints of right-of-way, the PDT recommended further design refinement of this space based on topographic, drainage, and pedestrian access considerations and environmental concerns.

Table 5.6

Castroville Station Cost Estimate Summary

Work Description	Initial Estimates		Track Improvements	Revised Estimates		
	Site 1	Site 2		Site 2 Option A	Site 2 Option B	Site 2 Option C
Parking and Access	\$ 857,428	\$1,833,278	\$ —	\$1,715,498	\$1,564,400	\$1,713,714
Pedestrian Grade Separation	—	576,000	—	600,000	600,000	—
Platform and Station Amenities	603,456	603,456	—	686,556	686,556	686,556
Track/Signal Improvements	6,600	6,600	2,248,476	213,850	213,850	213,850
Specialty Items	24,000	24,000	128,910	—	—	—
Mobilization	149,148	246,733	237,739	261,590	246,481	261,412
Contingencies (15%)	246,095	407,110	392,269	431,624	406,693	431,330
Construction Total	1,886,728	3,697,177	3,007,393	3,909,118	3,717,979	3,306,862
Soft Costs	622,620	1,220,069	992,440	1,290,009	1,226,933	1,091,264
Right-of-Way	—	—	—	—	—	—
Total	\$2,509,348	\$4,917,246	\$3,999,833	\$5,199,127	\$4,944,913	\$4,398,126

Note: This cost estimate does not include right-of-way costs.

Source: Parsons (2002)

Salinas Layover Facility Alternatives

Two site areas were identified for the Salinas Layover Facility, all in close proximity to the end-of-the-line passenger rail station at Salinas. The general locations of the sites investigated are illustrated on Figure 13 of the PSR.

Initially, conceptual layouts were developed for Site 1, which is northeast of the main line track on property owned by UPRR and currently used for freight rail support operations. Site 1A was once used for two tracks serving an agricultural produce elevator. This site is currently vacant and its tracks and buildings have been removed. For this site, a four-train-on-two-track “tandem” layover facility was conceptually designed as illustrated on Figure 14 of the PSR. Site 1B is a lightly used six-track yard, once used for trailer-on-flatcar loading. This yard and adjacent ramp are no longer used for this purpose. For this site, a four-track layover facility was conceptually designed as illustrated on Figure 15 of the PSR.

These conceptual site plans were reviewed with UPRR real estate and operating representatives to collect input, as both layover facility sites occupied UPRR right-of-way. UPRR operational staff were not in favor of either option for Site 1, contending that passenger train movements from station platform to layover track (and vice versa) would

necessarily occupy and therefore tie up the mainline track, potentially posing freight capacity impacts. The Union Pacific Railroad Company representatives suggested looking at vacant land parcels not owned by UPRR southwest of the mainline track. They also suggested developing a separate station track for commuter rail and Amtrak passenger service, similar to the requirements posed for the Pajaro Valley and Castroville stations.

In response to these UPRR “requirements,” several conceptual site plans were developed for Site 2, southwest of the main line track. Representative examples of these alternatives are illustrated on Figures 16, 17, 18, and 19 of the PSR.

Each of these layover facility site plans reflects use of the southwest main line track for station platform access and switchback to the layover yard tracks. The design also reflects upgrade of the adjacent passing track to main line status and condition, construction of new turnouts, and upgraded signaling.

Capital costs were estimated for each of these sites and site alternatives exclusive of right-of-way. As reported in Table 5.7, these order-of-magnitude costs ranged from \$4.35 million to just under \$5.0 million for Site 1 (not acceptable to UPRR) and \$6.3 million for Site 2.

Table 5.7

Salinas Layover Facility Cost Estimate Summary

Work Description	Option 1A	Option 1B	Option 2A	Option 2C	Option 2D	Option 2E*	Option 2G
Parking and Access	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Pedestrian Grade Separation	—	—	—	—	—	—	—
Platform and Station Amenities	—	—	—	—	—	—	614,352
Track/Signal Improvements	2,541,692	2,268,267	2,184,792	2,269,900	2,269,900	3,094,280	2,062,540
Specialty Items	386,500	317,600	337,750	389,100	389,100	624,400	387,400
Mobilization	292,819	258,587	252,254	265,900	265,900	371,868	306,429
Contingencies (15%)	483,152	426,668	416,219	438,735	438,735	613,582	505,608
Construction Total	3,704,162	3,271,121	3,191,015	3,363,635	3,363,635	4,704,130	3,876,329
Soft Costs	1,222,374	1,079,470	1,053,035	1,110,000	1,110,000	1,552,363	1,279,189
Right-of-Way	—	—	—	—	—	—	—
Total	4,926,536	4,350,591	4,244,050	4,473,635	4,473,635	6,256,493	5,155,518

Note: This cost estimate does not include right-of-way costs.

*This item incorporates additional track improvements to build a new yard lead track. The cost includes \$400,250 for the additional hazardous materials mitigation.

Source: Parsons (2002)

One additional Site 2 option was explored to avoid the need for use of the south main line track for Caltrain station access and upgrade of the adjacent passing track to main line status and condition. Illustrated on Figure 20 of the PSR, Option 2G would construct new Caltrain station tracks to the southwest of the existing main line track. These tracks would stub end at the Salinas Station. A new platform would be constructed for Caltrain passenger loading and the existing Amtrak platform would be extended in a westerly direction to serve both Caltrain and Amtrak passengers. The capital cost of this option was estimated to be \$5.2 million, exclusive of right-of-way. Right-of-way costs are anticipated to be higher, however, compared with the other conceptual design options.

Right-of-way costs are in addition to the above-cited capital costs. Figures 16 through 20 of the PSR identify the approximate boundaries of Site 2 land parcels, as recorded by the Monterey County Tax Assessor’s office. Parcel characteristics are summarized in Table 5.8. As the precise footprint of a layover facility on Site 2 will not be identified until right-of-way negotiations have advanced and a corresponding design option is refined, Site 2 will be investigated in its entirety for potential environmental impacts.

Table 5.8

Salinas Layover Facility Potential Right-of-Way Characteristics

No.	APN	Name of Owner	Address of Owner	Approximate No. of Acres	Comments
4	002021006000	Baillie Family Limited Partners	Salinas, CA	1.01	
5	002021007000	Neubert Armin K Tr et al	Salinas, CA	1.05	
6	002021008000	Neubert Armin K Tr et al	Salinas, CA	2.22	
7	002021009000	Neubert Armin K Tr et al	Salinas, CA	0.31	
8	002031031000	Patrick Investments, LLC	Genoa, NE	3.22	Vacant
13	002031030000	MWM Investment, LLC	Salinas, CA	2.14	Truck terminal
19	002171028000	MWM Investment, LLC	Salinas, CA	2.15	Truck terminal

Source: TAMC

Site 2 is the preferred alternative for the Salinas station and Layover Yard. UPRR staff was not in favor of either option for Site 1 contending that passenger train movements from station platform to layover track (and vice versa) would necessarily occupy the mainline track, potentially posing freight capacity impacts. It was also determined that UPRR freight operations would be impacted with the selection of Site 3 for the layover facility. Although UPRR has not provided comments on the feasibility of Site 3, the PDT has reasoned (based on previous comments from UPRR) that it would be less acceptable than Site 2 (Parsons, 2003).

5.4 PROJECT ALTERNATIVES

The No Project Alternative and the Alternate Castroville Site Alternative are described below:

No Project Alternative

The No Project alternative would maintain current land uses as the project would not be constructed. This alternative will not result in new impacts as the site will remain in its current use. No new impacts to land use, geology, biological resources, cultural resources, public services, energy, aesthetics, traffic, or noise would occur as the current status would be maintained.

However, the No Project Alternative would be the most environmentally damaging insofar as air quality.

Alternate Site

The Alternate Castroville site would have similar impacts to the LPA, except for agricultural impacts, which would be slightly less than with the LPA. However, due to the more urban location of the station in the Alternative Castroville Site, this alternative would result in an increase in traffic circulation impacts and congestion, and would not be expected to reduce any of the significant cumulative impacts.

5.5 CONCLUSIONS

Reasonable project alternatives have been evaluated and analyzed to determine their feasibility and impacts in comparison to the Project. The Project results in more significant impacts or impacts that result in a higher level of disturbance, than any of the alternatives. However, it also meets all of the goals established by TAMC.

Because the No Project Alternative assumes that no development of the project would occur, this alternative is the least environmentally damaging. However, the No Project Alternative would not allow the applicant to achieve their objectives for this project.

The Alternate Castroville site would have similar impacts to the LPA. However, due to the more urban location of the station in the Alternative Castroville Site, this alternative would not be expected to reduce any of the significant cumulative impacts.

Based on the analysis in previous sections of the EA/EIR, the proposed project is the environmentally superior alternative among the alternatives. In addition, it results in impact reductions to air quality, socioeconomics, and traffic and transportation. Therefore, the proposed project is considered the environmentally superior alternative.

5.6 REFERENCES

Parsons, 2004. *Caltrain Extension to Monterey County Project Study Report, Alternatives Development (Appendix A.i)*. Prepared for Transportation Agency for Monterey County. Revised September 10.

Parsons, 2003. *Caltrain Extension to Monterey County Project Study Report, Salinas Layover Facility - Alternatives Development (Appendix A.ii)*. Prepared for Transportation Agency for Monterey County. Revised March 13.

6.0 CONSULTATION AND COORDINATION

6.1 PUBLIC INVOLVEMENT AND INFORMATION

Both the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) encourage public participation throughout the process of alternatives development and analysis. This section describes the public and government agency coordination efforts that were conducted during the EA/EIR process. The public involvement program for this project included extensive community meetings and consultations with citizens, various municipalities, regulatory agencies, and other interested groups

6.1.1 Public Involvement Activities and Information Meetings

Community meetings regarding the provision of passenger rail service, the proposed location of stations and support facilities, and the conceptual design of Caltrain facilities were held in Pajaro (March 31, 2003), Castroville (January 15, 2003), and Salinas (March 31 and April 2, 2003). Public comments received during these meetings are included as part of the Initial Study prepared for the project (Parsons, 2003). A summary of these comments are included below.

Pajaro Community Meeting

A community meeting concerning train service to Pajaro was held on March 31, 2003 at the Pajaro Middle School, 250 Salinas Road, Pajaro. There were approximately 60 members of the Pajaro community in attendance. Translation to Spanish was provided to ensure full participation. Comments were taken and recorded to be incorporated into the Initial Study. Comments and concerns included remediation of the station site, rail service times, stops, and passenger services at the depot, circulation, bike and pedestrian access and safety, security, noise, and traffic issues.

Castroville Community Meeting

A community meeting concerning train service to Pajaro was held on January 15, 2003 at Gambetta Elementary School in Castroville. There were approximately 70 members of the Castroville community in attendance. Apex Strategies facilitated the community input. Comments were taken and recorded to be incorporated into the Initial Study. Comments and concerns included weekend service, need for pedestrian undercrossing, connection of bike route through the site to the high school, improvements to SR 156, building aesthetics and design should blend in, security, passenger services, parking, noise issues, and energy efficiency. Three goals of the meeting were to integrate the project with the Community Plan, minimize traffic impacts, and include a pedestrian path to the high school.

Salinas Property Owners Meeting

A meeting concerning train service to Salinas was held on March 31, 2003, with owners of properties in the Salinas area. The meeting was held at the Chapala's Restaurant, 438 Salinas Street, Salinas. There were approximately 40 property owners in attendance. Apex Strategies facilitated the community input. Comments were taken and recorded to be incorporated into the Initial Study. Comments and concerns included a time schedule for taking of property, viability of state and federal funding for project, transportation management issues, truck traffic on Market Street, affect of closing business on nearby businesses, parking calculations, and the movement and layover of trains.

Salinas Community Meeting

A meeting concerning Caltrain service to the Monterey Peninsula was held on April 2, 2003, at the Steinbeck Center in Salinas. There were approximately 30 members of the Salinas community in attendance. Apex Strategies facilitated the community input. Comments were taken and recorded to be incorporated into the Initial Study. Comments and concerns included the cost of fares for train service, delays due to shared track utilization, whether to impose parking fees to park in the parking garage/lots, security concerns, more frequent service and institute weekend service, passenger services in the stations, design and aesthetics of station buildings, development of local commercial businesses surrounding the station site, traffic circulation, pedestrian access, and access into the Oldtown area.

In addition, public participation meetings were held in each community (Pajaro, Castroville, and Salinas) between May and November of 2002.

6.1.2 Other Public Information Mechanisms

Design concepts, status, issues, and public input were regularly presented to policy boards and advisory committees and as public outreach to interested parties within the community. These public forum presentations included:

- January 22 and 30, 2003 – Caltrain Extension project discussed with UPRR staff
- May 5, 2003 – Rail Policy Committee (RPC) tours Salinas project site (public meeting)
- June 9, 2003 – Presentation on Salinas and Pajaro to MST Board (open to public)
- June 25, 2003 – Presentation to TAMC Board (public meeting)
- June 26, 2003 – Caltrain Extension project discussed with UPRR staff
- August 28, 2003 – Caltrain Extension project discussed with FTA staff

- September 15, 2003 – Caltrain Extension project presented to MST Board and Facilities Subcommittee (public meeting)
- December 9, 2003 – Presentation on Pajaro station and Caltrain Extension to Watsonville City Council (public meeting)
- April 26, 2004 – FTA staff tour of project sites
- May 3, 2004 – Presentation on Salinas site to RPC (public meeting)
- June 23, 2004 – Castroville Community Plan Citizens Advisory Committee on Castroville station. Approximately 30 members of public in attendance. (public meeting)
- June 30, 2004 – Caltrain Extension project discussed with Coastal Commission staff
- August through December, 2004 –Affected property owners in Salinas met individually with TAMC (dates and minutes available for review at TAMC office).
- November 4, 2004 – Presentation to Oldtown Salinas Business Association on Salinas ITC (public presentation)
- November 8, 2004 – Presentation to MST Facilities Committee on Salinas project site (open to public).
- December 13, 2004 – MST Board presentation on Salinas project site (open to public).
- January 18, 2005 – Meeting with concerned citizens on Salinas Freight Building. Organized by Salinas RDA. Public meeting – approximately 50 people attended to ask questions. The group expressed that they did not want the freight building removed or relocated.
- February 1, 2005 – Salinas project site on agenda for Salinas City Council at a regularly scheduled City Council meeting (open to the public). Public input was received on the project and entered into the record. American Supply (a business within the project area) opposed the project, and City Council members stated their opinions for the record. City Council approved Salinas ITC Expansion Configurations 17 and 18 for environmental review.

6.2 CONSULTATIONS

6.2.1 Consultation Meetings

A series of monthly Project Development Team (PDT) meetings were held between March 2002 and February 2005. Meetings were held at either the offices of the Monterey County RDA or TAMC. Discussion topics included review of scope of work and schedules, design of project and project components, integration with existing data (traffic, noise, ridership expectancy, etc.), negotiations with other agencies and parties (UPRR, FTA, PCJPB, Santa Cruz RTD, Monterey County RDA, and MST), parking options, status reports, and funding requirements and updates.

In addition to the single meeting with Salinas property owners in March 2003, a series of meetings were held with affected property owners from August 2004 through December 2004.

6.2.2 Other Consultations

Correspondence

Mr. Albert Cerna, NRCS Salinas Field Office (Letter 10-08-02)

Mr. Darrin Thome, USFWS Ventura Fish & Wildlife Office (Letter 10-09-02)

Ms. Diane K. Noda, USFWS Ventura Fish & Wildlife Office (Letter 10-28-02)

Persons Contacted

Mr. John Doughty, Director, Community Development Department, City of Watsonville
(email 10-1-02)

Ms. Charmaine M. Geiger, Director, Community Development Department, City of
Salinas (email 10-3-02)

Mr. Robert Richelieu, Planning Manager, City of Salinas (email 10-4-02)

Ms. Monica Nunez, Pajaro/Sunny Mesa Community Services District (telephone 3-7-03)

6.3 CHRONOLOGY OF COORDINATION

The project has been coordinated with the Union Pacific Railroad (UPRR), the Peninsula Corridor Joint Powers Board (PCJPB), Metropolitan Transportation Commission (MTC), Caltrans, the Santa Clara Valley Transportation Authority (VTA), the City of Salinas, the Monterey County Redevelopment Agency (RDA), Monterey-Salinas Transit (MST), the City of Watsonville, the Santa Cruz County Regional Transportation Commission (RTC), Amtrak West, and the Santa Cruz Metropolitan Transit District (SCMTD). Specific

ongoing efforts by these parties include the City of Salinas' plans for intensified transit-oriented development near the Salinas station site, Caltrans' plans for upgrading SR 156 east of Castroville Boulevard, the Castroville Community Plan, the Pajaro Community Plan, UPRR's short- and long-term plans for freight and yard operations, and the California Passenger Rail System Five-Year Improvement Plan.

Project scoping activities have been ongoing since 1993. A Passenger Rail Feasibility Study (Parsons, 2000), including a business plan, was completed in 2000. The business plan considered but did not thoroughly evaluate alternative sites for stations at Pajaro and Castroville and a layover yard in Salinas. The business plan also included a preliminary assessment of patronage potentials, passenger rail operations, and project costs, revenues and potential funding sources.

From June 1996 to June 1998, the City of Salinas sponsored investigations of development options for a Salinas Intermodal Transportation Center (ITC) to be developed at the site of the existing Amtrak station. Phase I of the ITC, consisting of bus layover bays, surface parking, site landscaping and lighting, was subsequently constructed and placed into operation in 1999.

In 1997, the City of Watsonville prepared a *Draft Pajaro Valley Station Project Study Report* in cooperation with Monterey County, TAMC and the Santa Cruz RTC. While not finalized, this draft project study report identified a potential site location and set of program requirements for this station. During the time period from 1998 to 2000, these program requirements and opportunities for adjacent site development were further refined and explored by the Monterey County-sponsored *Pajaro Railyards Feasibility Study*. This study sited the Pajaro Valley Station adjacent to the former Southern Pacific Passenger Depot. The Pajaro area is identified in the Watsonville General Plan as being considered in the amendment to expand the City's sphere of influence (City of Watsonville, 1994).

In 2000, TAMC sponsored the preparation of the *Extension of Caltrain Commuter Service to Monterey County Business Plan*. The business plan considered, but did not thoroughly evaluate alternative sites for stations at Pajaro and Castroville and a layover yard in Salinas. Following the completion of the business plan, a Pajaro Valley Station Working Committee of public agency staff met regularly during 2001 to discuss site location alternatives and program requirements.

In 2005, the Metropolitan Transportation Commission (MTC) prepared and adopted the *Transportation 2030 Plan for San Francisco Bay Area* (MTC, February 2005). This Plan identified the Caltrain Extension from Gilroy to Salinas as one of the Commission's committed projects (MTC Project 21770), and as part of a strategic expansion program for Santa Clara County (Transportation 2030 Plan Appendix 1, page 117).

6.4 PREPARERS

Public Agencies

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7.0 SECTION 4(F) EVALUATION

7.1 PURPOSE OF SECTION 4(F) EVALUATION

Note: This EIR is part of a joint NEPA/CEQA document (EA/EIR), but this circulation of the document is for CEQA purposes only. This chapter, Section 4(f) Evaluation, is only required under NEPA.

The following evaluation is made pursuant to Section 4(f) of the U.S. DOT Act of 1966, 49 U.S.C. 303(c). Section 4(f) declares that “it is the policy of the United States government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation land, wildlife and waterfowl refuges, and historic sites (49 U.S.C. § 303).” It further states that “the Secretary [of Transportation] may approve a transportation program or project...requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site), only if—

1. There is no feasible and prudent alternative to using that land; and
2. The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.”

Section 4(f) is applicable to historic sites and archaeological resources when the resource is included in, or is determined eligible for, the NRHP. Section 4(f) may not apply to archaeological sites where it is determined after consultation with the SHPO, consulting Native American tribes, and the Advisory Council on Historic Preservation (ACHP) that the resource is important chiefly because of what can be learned by data recovery and has minimal value for preservation in place.

Section 4(f) also applies to historic districts. Affected sites must be an integral part of the historic district and must contribute to the factors that make the district significant.

Section 4(f) further requires consultation with the Department of the Interior (DOI) and, as appropriate, the offices of the Departments of Agriculture and Housing and Urban Development in developing transportation projects and programs that use Section 4(f) protected lands.

7.2 PROPOSED PROJECT

Currently in the Monterey County and San Francisco Bay areas, job distribution and worker housing distribution patterns do not match. The San Francisco Bay counties have job surpluses, requiring non-residents to fill the available positions (Metropolitan Transportation Commission). This pull of workers has created a large increase in interregional commuter traffic, leading to highway congestion and poor air quality in the basin.

The U.S. Census for 2000 estimates that 18,073 persons living within Monterey County work in another county. Of this number, more than 30 percent are employed within Santa Clara or other Bay Area counties. Available public transportation choices between Monterey County and Santa Clara County are limited to three Greyhound bus trips. AMTRAK trains and motor coach service to the Capitol Corridor trains do not operate during normal northbound commute periods. As a consequence, residents of Monterey County who work in Santa Clara County and points north must use private vehicles to travel between home and work. Route 101 is currently the most viable route for these commuter trips.

The project would provide extended Caltrain service from the existing terminus in Gilroy to Monterey County, including stations in Pajaro, Castroville, and Salinas, to accommodate a portion of inter-county commute oriented traffic, provide residual capacity for future travel demand increases, and improve regional air quality.

The proposed extension of Caltrain to Salinas would provide an alternative means of travel between Monterey County and southern Santa Cruz County to the San Francisco Bay Area, significantly reducing congestion along Highway 101 up into Santa Clara, San Mateo, and San Francisco counties, thereby improving regional air quality. In addition, the proposed rail service is a cost effective alternative to widening U. S. Highway 101.

In addition to lowering congestion on the roadways, the commuter rail extension will bring a significant increase in ridership to the existing Caltrain service. Other benefits to this new service include an increase in job opportunities, more transportation alternatives for senior citizens and those with physical disabilities, increased access by students to educational resources, and economic development opportunities along the train route.

An in-depth discussion of the purpose and need for the project is provided in Section 1.2 of this EA/EIR and is incorporated herein by reference.

7.3 PROJECT ALTERNATIVES USING SECTION 4(F) LANDS

Two alternatives were considered for the Caltrain extension project. These alternatives consist of a No Build Alternative and a Build Alternative, which are fully described in Section 2. Of these two alternatives, the Build Alternative would result in the use of Section 4(f) lands.

The Build Alternative would impact the former Southern Pacific Freight Depot at Salinas, a Section 4(f) property described in Section 3.4, Cultural Resources. Detailed description of the use that the action proposes to make of the affected Section 4(f)-protected property is provided in Section 2, Project Description.

7.4 OTHER ALTERNATIVES CONSIDERED, BUT ELIMINATED

During the development of the Caltrain extension project, three alternative locations for the Salinas Layover Yard Facility were considered. Two of these alternatives, Site #1 north of the Salinas Amtrak facility and Site #3 approximately 1 mile southeast of the Amtrak facility, did not meet the project purpose and need. The No Build alternative would limit the transportation uses that TAMC, Monterey-Salinas Transit and the City of

Salinas envision, and it would reduce the project's ability to create a regionally significant multimodal transportation center. For these reasons, this alternative was eliminated.

7.5 SECTION 4(F) PROPERTIES

The Caltrain Extension to Monterey County Project area was subjected to background research, field surveys, interviews, and aerial photo analysis by land use planners, biologists, archaeologists, and historians to locate any and all public parks and recreation areas, wildlife and waterfowl refuges, and historic sites potentially affected by the proposed project.

No public parks, recreation areas, or wildlife or waterfowl refuges were identified within the project area. One NRHP-eligible site was identified in the Salinas Intermodal Transportation Center project area, the impacts to which are further evaluated in this Section 4(f) analysis.

7.5.1 Historic Sites

A cultural resources investigation conducted for the proposed project found 11 historic structures within the APE of the proposed project. One structure, the former Southern Pacific Freight Depot at Salinas, is recommended as eligible for inclusion in the NRHP.

7.5.1.1 *Southern Pacific Freight Depot at Salinas*

The Southern Pacific Freight Station Depot Building at Salinas was identified within the project APE as an historic cultural resource of potential significance for NRHP eligibility and recommendation under Criteria A and C. This structure is recommended as eligible for inclusion in the NRHP under Criterion A as part of the proposed federal undertaking because it is "...associated with events that have made a significant contribution to the broad patterns of our history."

7.6 IMPACTS ON SECTION 4(F) PROPERTIES

7.6.1 Southern Pacific Freight Depot at Salinas

The Salinas Southern Pacific Freight Depot is located along the northeastern boundary of the project area. The facilities proposed at Salinas will be clustered in the vicinity of the existing Amtrak station, now known as the Salinas Intermodal Transportation Center. This area is totally urbanized within the limits of the City of Salinas. It is in Township 14 South, Range 3 East near USGS Benchmark 49 (USGS Salinas quadrangle, 1947 [photorevised 1984]). The Salinas Intermodal Transportation Center facilities would include:

- (1) A parking structure adjacent to the station (Configuration 17). A surface parking alternative has also been identified (Configuration 18)
- (2) Bicycle lockers and bicycle racks

- (3) Reconstruction and expansion of the passenger loading platform (Configuration 17) and the addition of a second platform (Configuration 18)
- (4) Platform shelters, canopies, lighting, furniture and fixtures, information displays and landscaping
- (5) Modification and/or addition of site access and circulation roadways
- (6) Traffic signalization, signing, and striping
- (7) Construction of a MST bus transit center with passenger waiting and operations support facilities
- (8) Construction/relocation of track, turnouts, track removals, and railroad signaling, as may be required
- (9) Construction of intercity bus loading berths and renovation of a freight rail building
- (10) Site drainage, lighting, and landscaping
- (11) Building demolition
- (12) ROW acquisition
- (13) Roadway improvements

7.7 AVOIDANCE ALTERNATIVES

Eighteen alternatives, including those eliminated, were evaluated in terms of their potential to use Section 4(f) properties.

- **No Build Alternative**

The No Project alternative would maintain current land uses as the project would not be constructed. This alternative will not result in new impacts as the site will remain in its current use. No new impacts to cultural resource would occur as the current status would be maintained. However, the No Project Alternative would be the most environmentally damaging insofar as air quality.

- **Configuration Alternatives 1 through 18**

Eighteen site layouts were developed to explore options for accommodating Monterey-Salinas Transit (MST) and Greyhound bus operations along with an expanded supply of parking for Caltrain commuter needs (Parsons, 2003). Options 1 through 16 were withdrawn from further consideration; six of the options explored by this investigation were intended to build upon the existing ITC investment, rather than pursuing a teardown and start over strategy, while the remaining would significantly alter the existing use of space.

Based on its earlier investigation of site assembly alternatives, the City of Salinas was able to furnish guidance regarding the feasibility of parcel acquisition and/or utilization. This guidance indicated that existing businesses fronting the Salinas

ITC and Market Street should be retained to the extent possible. Vacant and/or underutilized lands should be considered for acquisition or lease. Parking supplies needed for commercial tenants and their customers should be retained. Future redevelopment of lands with low levels of improvement should be considered. A view corridor between the downtown, the Steinbeck Center and the ITC should be preserved if possible.

7.7.1 No Build Alternative

With the No-Build (No-Project) alternative, Caltrain service would not extend south from Gilroy to Pajaro (Watsonville Junction), Castroville, and Salinas. US 101 would continue to be the most viable commuter route. The proposed extension of Caltrain to Salinas would provide an alternative means of travel between Monterey, Santa Cruz, and San Benito counties, thereby reducing congestion along Highway 101 into Santa Clara, San Mateo, and San Francisco counties, and improving regional air quality. The proposed rail service is also a cost effective alternative to widening U. S. Highway 101 or constructing the Prunedale Bypass in Monterey County.

The No-Build Alternative constitutes the No-Project Alternative for purposes of the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The No-Build Alternative assumes that the following will not occur:

- rehabilitation and expansion of the Salinas station;
- construction of a layover facility at Salinas;
- construction of new stations at Castroville and Pajaro;
- minor track improvements between Gilroy and Salinas; and
- limited equipment acquisition.

Because the No Project Alternative assumes that no development of the project would occur, this alternative is the least environmentally damaging. However, the No Project Alternative would be the most environmentally damaging insofar as air quality and would not allow the applicant to achieve their objectives for this project.

7.8 MEASURES TO MINIMIZE HARM

The draft Section 4(f) evaluation should address all possible measures to minimize harm. A separate discussion of each resource is provided in Section 3.4, Cultural Resources, detailing how impacts would be minimized. A least harm analysis is intended to show how efforts were made to minimize impacts to each alternative.

All mitigation measures require appropriate documentation and coordination between the Transportation Agency for Monterey County and the official with jurisdiction, including SHPO when cultural resources are involved.

No recreation properties would be impacted under the proposed project.

7.8.1 Southern Pacific Freight Depot at Salinas

Both configurations (17 and 18) of the project at the Salinas ITC propose to remodel the Southern Pacific Freight Depot, an existing unused freight building, for intercity bus passenger and other transit support operations. The Southern Pacific Freight Depot is located along the northern boundary of the project area and is recommended as eligible for inclusion in the NRHP under Criterion A as part of the proposed federal undertaking because it is "...associated with events that have made a significant contribution to the broad patterns of our history." Both configurations (17 and 18) of the project at the Salinas ITC propose to remodel an existing unused freight building for intercity bus passenger and other transit support operations. The Salinas Southern Pacific Freight Depot is located along the northern boundary of the project area. This structure is recommended as eligible for inclusion in the NRHP under Criterion A as part of the proposed federal undertaking because it is "...associated with events that have made a significant contribution to the broad patterns of our history." The proposed project would require the remodel and expansion of the freight depot, a one-story, wood-framed, rectangular building, approximately 5,000 square feet in size.

The historic character of the Salinas Freight Depot will be retained and preserved by implementation of the Secretary of the Interior Standards for the Treatment of Historic Properties (36 CFR Part 68). The following mitigation measures shall be implemented at the Salinas site:

- Photo documentation of the restoration/rehabilitation process, and
- A preservation architect shall be present onsite to supervise the actual process and construction.

Reuse of an historic resource is of great importance and the mission of the Secretary of the Interior. Specifically, rehabilitation standards acknowledge the need to alter or add to a historic building to meet continuing or new uses while retaining the building's historic character.

7.9 COORDINATION

TAMC and FTA have initiated consultation with the SHPO and the Native American Heritage Commission (NAHC) regarding historic sites found within the project area.

The Native American Heritage Commission (NAHC) was contacted on October 7, 2002 (Parsons, 2002), requesting that the NAHC conduct a search of their sacred land files for presence of Native American cultural resources. It was also requested that any background information about prehistoric, historic or contemporary Native American land use within the project areas be identified. The final request was for a list of local Native American individuals and groups that may have knowledge of land use within the project areas.

The NAHC replied on October 11, 2002. The search of sacred land files failed to indicate the presence of Native American cultural resources within the project areas. The NAHC also provided a list of 14 Native American individuals or groups that may have knowledge of Native American land use within the project area.

Each of the Native American groups or individuals were sent a letter and project area maps requesting any information they may have regarding Native American land use of the project area. Each letter was sent registered mail and all letters were delivered and received by the addressed recipient. One response was received from the Esselen Nation on December 2, 2002. This letter stated that The Esselen Nation is concerned about all projects within their aboriginal homeland and are very interested in the project and concerned that cultural resources may be discovered during construction.

A follow-up phone conversation on December 15, 2003 between Steven M. Hilton and Rudy Rosales, Cultural Resources and Tribal Chairperson for the Esselen Nation, was conducted. During this phone conversation it was discussed that if any cultural resources were discovered during construction the Esselen nation would be notified, and before any further construction would commence a qualified archaeologist would be consulted to verify the significance of the archaeological materials.

7.10 REFERENCES

Parsons, 2005. *Cultural Resources Technical Report*. August.

Parsons, 2003. *Draft Salinas Intermodal Transportation Center Expansion Alternatives*. Appendix C.ii, Project Study Report. April 15.