ADMIN DRAFT
ENVIRONMENTAL IMPACT REPORT

FOR THE

WEST AREA SPECIFIC PLAN (WASP) EIR

VOLUME I (EIR)

JUNE 2018

Prepared for:

City of Salinas
Community and Economic Development Department
65 West Alisal Street (Second Floor)
Salinas, CA 93901

Prepared by:

De Novo Planning Group
1020 Suncast Lane, Suite 106
El Dorado Hills, CA 95762
(916) 580-9818

De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

ADMIN DRAFT
ENVIRONMENTAL IMPACT REPORT

FOR THE

WEST AREA SPECIFIC PLAN (WASP) EIR
VOLUME I (EIR)

JUNE 2018

Prepared for:

City of Salinas
Community and Economic Development Department
65 West Alisal Street (Second Floor)
Salinas, CA 93901

Prepared by:

De Novo Planning Group
1020 Suncast Lane, Suite 106
El Dorado Hills, CA 95762
(916) 580-9818

INTRODUCTION

The City of Salinas (City) has determined that a program-level environmental impact report (EIR) is required for the proposed West Area Specific Plan (Specific Plan or WASP) Project (proposed project) pursuant to the requirements of the California Environmental Quality Act (CEQA).

This EIR has been prepared as a Program EIR pursuant to CEQA Guidelines Section 15168. The program-level analysis considers the broad environmental effects of the West Area Specific Plan. CEQA Guidelines Section 15168 states that a program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:

1) Geographically;
2) As logical parts in the chain of contemplated actions;
3) In connection with issuance of rules, regulations, plans or other general criteria to govern the conduct of a continuing program; or
4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

The program-level analysis considers the broad environmental effects of the proposed West Area Specific Plan. The EIR examines all phases of the project including planning, construction and operation. The program-level approach is appropriate for the West Area Specific Plan because it allows comprehensive consideration of the reasonably anticipated scope of development plan; however, not all aspects of the future development are known at this stage in the planning process. Development projects in the Specific Plan Area that require further discretionary approvals will be examined in light of this EIR to determine whether additional environmental documentation must be prepared.

PROJECT DESCRIPTION

The following provides a brief summary and overview of the proposed project. Section 2.0 of this EIR includes a detailed description of the proposed project, including maps and graphics. The reader is referred to Section 2.0 for a more complete and thorough description of the components of the proposed project.

The proposed West Area Specific Plan will establish the land use planning and regulatory guidance including the land use and zoning designations and policies, development regulations and design standards for the approximately 797-acre Specific Plan Area. The Specific Plan will serve as a bridge between the Salinas General Plan and individual development applications in the Specific Plan Area, applying—and adding greater specificity to—the goals, policies and concepts of the General Plan for that area. The Specific Plan provides a complete blueprint for development of the Specific Plan Area, including:

- A description of proposed land uses,

- Policies, regulations and standards to support the Specific Plan,
- Infrastructure needed to support the Specific Plan, and
- Implementation and administrative processes needed for plan development.

The Specific Plan has been crafted to be consistent with overall community goals as expressed in the City of Salinas General Plan, as well as more specific policies and implementation measures contained in other documents. The City of Salinas Zoning Code requirements will apply to development applications and property within the Specific Plan Area unless specifically superseded by the development regulations or design standards contained in the Specific Plan.

The principal objective of the proposed project is the approval and subsequent implementation of the proposed West Area Specific Plan and related entitlements. Proposed land uses in the 797-acre Specific Plan Area include residential, mixed use commercial, community park, neighborhood parks, small parks and open space (including supplemental storm water detention/retention basins). Implementation will involve development of the site under the New Urbanism Zoning districts of Neighborhood Edge (NE)/Low Density Residential, Neighborhood General 1 (NG-1)/Low/medium Density Residential, Neighborhood General 2 (NG-2)/High Density Residential, Village Center (VC) as well as the Public and Semipublic (PS), Parks (P), and Open Space (OS) zoning districts. A Specific Plan Overlay district will also apply to each zoning districts.

The quantifiable objectives of the proposed project include the development of up to 4,340 residential dwelling units (with a minimum of 3,553 required under the General Plan), up to 571,500 square feet of commercial/mixed use building area, and up to 177 acres of public facilities (including three elementary schools, a high school, middle school, supplemental detention/retention basins and 11 parks). It is anticipated that the Specific Plan Area will have up to 15,928 residents at project build-out.

Refer to Section 2.0, Project Description, for a more complete description of the project details.

AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

This Draft EIR addresses environmental impacts associated with the proposed West Area Specific Plan Project that are known to the City of Salinas, were raised during the Notice of Preparation (NOP) process, or raised during preparation of the Draft EIR. This Draft EIR discusses potentially significant impacts associated with air quality, biological resources, cultural and tribal resources, greenhouse gases, climate change, and energy, hazards and hazardous materials, hydrology and water quality, noise, population and housing, public services, transportation/circulation, and utilities.

The City received seven written comments on the NOP for the proposed WASP Draft EIR. A copy of each letter is provided in Appendix A of this Draft EIR. The comments covered the following aspects of the proposed Specific Plan, each of which is considered a public concern:

- Potential impacts to cultural and tribal cultural resources (2);
- Potential impacts to traffic and circulation;

- Potential impacts on local public transit;
- Potential impacts on the local public school system;
- Consideration of agricultural impacts; and
- Consideration of mosquito reduction best management practices.

ALTERNATIVES TO THE PROPOSED PROJECT

Section 15126.6 of the CEQA Guidelines requires an EIR to describe a reasonable range of alternatives to the project or to the location of the project which would reduce or avoid significant impacts, and which could feasibly attain most of the basic objectives of the proposed project. The alternatives analyzed in this EIR include the following four alternatives in addition to the proposed West Area Specific Plan Project:

- No Project (Existing General Plan) Alternative
- Reduced Land Area Alternative
- Reduced Residential Intensity/Density Alternative
- Smaller-scale Project Alternative

Alternatives are described in detail in Section 5.0, Alternatives to the Proposed Project. A comparative analysis of the proposed project and each of the project alternatives is provided in Table ES-1. As shown in the table, the No Project (No Build) Alternative is the environmentally superior alternative. However, as required by CEQA, when the No Project Alternative is the environmentally superior alternative, the environmentally superior alternative among the others must be identified. The Smaller-scale Project Alternative is the next best alternative. It ranks equal or better than the proposed project for every environmental issue. In addition, in aggregate, the Reduced Land Area Project Alternative, and the Reduced Residential Intensity/Density Project Alternative rank better than the proposed project. It should be noted that the Reduced Residential Intensity/Density Alternatives does not meet all of the project objectives. Additionally, the reduced number of residential units in the Reduced Residential Intensity/Density Alternative would be inconsistent with the General Plan standards for the Plan Area, and would not meet the minimum number of residential units required for New Urbanism.

TABLE ES-1: COMPARISON OF ALTERNATIVE PROJECT IMPACTS TO THE WASP

ENVIRONMENTAL ISSUE	NO PROJECT (NO BUILD) ALTERNATIVE	REDUCED LAND AREA PROJECT ALTERNATIVE	REDUCED RESIDENTIAL INTENSITY/DENSITY ALTERNATIVE	SMALLER-SCALE PROJECT ALTERNATIVE
Air Quality	Less	Slightly Less	Less	Less
Biological Resources	Less	Less	Equal	Less
Cultural Resources	Slightly Less	Slightly Less	Equal	Slightly Less
Greenhouse Gases and Climate Change	Less	Slightly Less	Less	Less
Hazards and Hazardous Materials	Less	Slightly Less	Slightly Less	Slightly Less
Hydrology and Water Quality	Less	Less	Slightly Less	Less
Noise	Less	Less	Less	Less
Population and Housing	Greater	Greater	Greater	Greater
Public Services	Slightly Greater	Slightly Less	Slightly Less	Slightly Less
Transportation and Circulation	Less	Less	Less	Less
Utilities	Less	Less	Less	Less

GREATER/SLIGHTLY GREATER = GREATER IMPACT THAN THAT OF THE WASP
LESS/SLIGHTLY LESS = LESS IMPACT THAN THAT OF THE WASP
EQUAL = NO SUBSTANTIAL CHANGE IN IMPACT FROM THAT OF THE WASP

SUMMARY OF IMPACTS AND MITIGATION MEASURES

The environmental impacts of the proposed project, the impact level of significance prior to mitigation, the proposed mitigation measures and/or adopted policies and standard measures that are already in place to mitigate an impact, and the impact level of significance after mitigation are summarized in Table ES-2.

TABLE ES-2: WEST AREA SPECIFIC PLAN IMPACTS AND PROPOSED MITIGATION MEASURES

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
AIR QUALITY			
Impact 3.1-1: The project has the potential to conflict with or obstruct implementation of the applicable air quality plan	PS	***Mitigation Measure 3.1-1****: The proposed project shall incorporate one or more of the following actions, as described within the MBARD's CEQA Air Quality Guidelines:* • *Phase development of residences so that population growth from the project is consistent with projections for forecast years in the AQMP.* • *Ensure that the jurisdiction's population forecasts are updated in the next AQMP by working with AMBAG or the appropriate local agency.* • *Reduce number of residences to ensure growth is consistent with the AQMP.* • *Implement sufficient transportation control measures to fully offset any increase in emissions related to future population in excess of AQMP forecasts.*	SU
Impact 3.1-2: Project operation has the potential to cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation	PS	***Mitigation Measure 3.1-2****: Prior to the approval of improvement plans, the project proponent shall incorporate the following features into project plans and specifications, as directed by the City of Salinas and the MBARD:* • *Provide traffic calming measures (for a minimum of 50% of streets and intersections within the Plan Area);* • *Provide preferential carpool/vanpool parking spaces for a minimum of 5% of the total parking spaces;* • *Ensure that a school bus is available throughout the Plan Area;* • *Require low-VOC cleaning supplies to be used by businesses and cleaning services within the Plan Area;* • *Require the use of low-VOC paint for all Plan Area architectural coatings (<100 g/L for residential <150 g/L for non-residential).*	SU

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		Mitigation Measure 3.1-3: *Prior to the approval of improvement plans, the project proponent shall consider effective ways to encourage the use of cleaner burning alternative vehicles within the Plan Area, including by encouraging and/or incentivizing the installation of alternative fuel (e.g. natural gas; electric) charging stations at locations spaced throughout the Plan area. For example, this can be achieved by providing preferential parking for alternatively-powered vehicles, including electric cars, natural gas vehicles, and hydrogen fuel cell vehicles. This can also be achieved by providing charging stations for electric vehicles. The project proponent shall consider requiring the installation of alternative fuel charging stations within the Plan Area, to serve as a local hub for alternative vehicle refueling.* ***Mitigation Measure 3.1-4****: Prior to the approval of improvement plans, the project proponent shall consider effective ways to encourage the use of alternative energy for the residential and commercial developments, including by implementing alternative energy (e.g. PV solar) building requirements, prior to the issuance of building permits. Additionally, prior to occupancy of the Plan Area, the project proponent shall coordinate with the MBARD to ensure that all feasible on-site renewable energy mitigation (including pre-installed electrical hookups) is incorporated into project plans and specifications.* ***Mitigation Measure 3.1-5:*** *Prior to the approval of improvement plans, the project proponent shall require the use of low-flow (high-efficiency) indoor water fixtures, including for bathroom and kitchen faucets, toilet fixtures, and showers, in compliance with or better than the standards required within the 2016 California Green Building Standards Code.* ***Mitigation Measure 3.1-6****: Prior to the approval of improvement plans, the project applicant shall require the use of water-efficient irrigation systems throughout the Plan Area (i.e. through the use of timers and/or water sensors).* ***Mitigation Measure 3.1-7****: Prior to occupancy, the project proponent shall coordinate with the MBARD to ensure that all feasible pedestrian/bicycle facilities are provided*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		within the Plan Area. Additionally, the project proponent shall consider offering free, shared, or discount rental bicycles at locations within the Plan Area. The project proponent shall also consider providing covered bicycling parking near the entrance to commercial establishments within the Plan Area. ***Mitigation Measure 3.1-8****: Prior to approval of improvement plans, the project proponent shall coordinate with the City of Salinas and the MBARD to establish an off-site mitigation program, coordinated by the MBARD. The program shall be designed to reduce criteria pollutant emissions to the extent feasible. Examples include, but are not limited to, retrofitting, repowering, or replacing heavy-duty engines from mobile sources (e.g. buses, construction equipment); or other programs the project proponent may proposed to reduce emissions.* ***Mitigation Measure 3.1-9****: Prior to approval of improvement plans, the project proponent shall consider incorporation of one or more of the following additional Plan Area requirements, which shall be incorporated as feasible:* • *Provide for a shuttle/mini-bus service for Plan Area employees;* • *Require the development of bicycle storage/parking facilities;* • *Require the installation shower/locker facilities for cyclists within the commercial portions of the Plan Area;* • *Provide on-site child care centers within the commercial portions of the Plan Area;* • *Incorporate park-and-ride lots.*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.1-3: Project construction has the potential to cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation	PS	***Mitigation Measure 3.1-10****: Prior to the issuance of grading permits, the project applicant shall prepare a grading plan subject to review and approval by the City. In the event that ground-disturbance exceeds 2.2 acres per day for initial site preparation activities that involve extensive earth-moving activities (e.g. grubbing, excavation, rough grading), and 8.1 acres per day for activities that involve minimal earth-moving (e.g. finish grading), the required grading plans shall include the following measures to be implemented as needed to prevent visible dust emissions:* • *Water all active construction sites to prevent visible dust emissions. Frequency should be based on the type of operation, soil, and wind exposure;* • *Prohibit grading activities during periods of high wind (over 15 mph);* • *Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days);* • *Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed area;* • *Maintain at least 1'-0" of freeboard in haul trucks;* • *Plant tree windbreaks or construct windbreaks on the windward perimeter of construction projects if adjacent to open land;* • *Sweep streets if visible soil material is carried out from the construction site; and/or* • *Post a publicly visible sign written in English and Spanish which specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Unified Air Pollution Control District shall be visible to ensure compliance with Rule 402 (Nuisance).*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.1-4: The proposed project has the potential to have carbon monoxide hotspot impacts	LS	None required.	--
Impact 3.1-5: The proposed project has the potential for public exposure to toxic air contaminants	PS	***Mitigation Measure 3.1-11:*** *Prior to the construction and/or operation of any commercial building that would emit toxic air contaminants, the project proponent shall, at a minimum, perform prioritization screening in accordance with the Air Toxics "Hot Spots" Program, Facility Prioritization Guidelines (July 1990) and the Air Toxics "Hot Spots" Information and Assessment Act. The prioritization screening shall be performed in coordination with the Monterey Bay Air Resources District, whom will be responsible for determining which facilities based on their prioritization screening score, must perform a health risk assessment. In determining the need to prepare a health risk assessment, the Monterey Bay Air Resources District should consider the potency, toxicity, quantity, and volume of hazardous materials released from the facility, the proximity of the facility to potential receptors, and any other factors specific to the facility that indicate that it may pose a significant health risk.* *If a health risk assessment is warranted for a facility based on its prioritization score, the project applicant shall assess the facilities for the potential to expose the public to toxic air contaminants in excess of the applicable thresholds. Facilities that exceed the applicable thresholds have the potential to expose the public to toxic air contaminants levels that would be considered significant. Mitigation is required for such facilities to ensure that the toxic air contaminants are reduced to levels below the threshold.*	LS
Impact 3.1-6: The proposed project has the potential for exposure to odors	PS	***Mitigation Measure 3.1-12:*** *If a project would emit pollutants associated with odors in substantial amounts (i.e. during project construction activities), the analysis should assess the impact on existing or reasonably foreseeable sensitive receptors. The American Society of Testing Materials has developed procedures to assess odor impacts (Standard Methods E679 and E1432). These methods establish a sensory threshold of detection or recognition of odors that is derived from the best-estimate value of a representative sample group. Once a sensory threshold is established, it should be compared to average or typical concentrations of odor-causing pollutants at existing or reasonably foreseeable*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		sensitive receptors. A protocol for assessing odor impacts should be determined with the air district.	
Impact 3.1-7: Cumulative impact on the region's air quality	PS	Implement Mitigation Measures 3.1-1 through 3.1-12.	CC and SU
BIOLOGICAL RESOURCES			
Impact 3.2-1: The proposed project has the potential to have direct or indirect effects on special-status invertebrate species	LS	None required.	--
Impact 3.2-2: The proposed project has the potential to have direct or indirect effects on special-status reptile and amphibian species	PS	***Mitigation Measure 3.2-1****: Prior to any construction activities, the project applicant shall consult with the USFWS and CDFW for concurrence and a final confirmation that a take permit is not necessary for impacts to the hybrid population of California tiger salamander located along Natividad Road. The regulatory agency concurrence confirmation shall be provided to the City of Salinas for the project file. If the status of this metapopulation were to change and become protected prior to construction, or the regulatory agencies do not concur that the metapopulation does not require a take permit, then the project applicant shall initiate a consultation with the agencies and obtain the appropriate take permits.* ***Mitigation Measure 3.2-2****: To avoid and minimize impacts to California tiger salamander to the extent feasible, the proposed project activities shall be compliant with the following Avoidance and Minimization Measures during Construction Activities:* *a. Prior to excavation work or other ground disturbance, a biologist(s) will conduct environmental education training for all construction personnel covering the California tiger salamander, the importance of avoiding adverse effects to the species. New personnel who are added to the project after the*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		training is first conducted also will be required to be trained. *b. The biologist(s) will oversee the hand excavation of any burrows located in suitable habitat that are within the project footprint (Farmland Fringe, Irrigation Ditch, Roadside Ditch, and Farmland Residence). These excavations will be performed carefully using hand-trowels and spades. Burrows will be excavated to the terminus of the tunnels, or to where the burrow is less than or equal to 0.5 inch in diameter.* *c. If ground disturbing activities in suitable habitat are projected to extend beyond the first rain of the rainy season, the applicant will erect drift fencing around the work areas, prior to commencing work, to prevent California tiger salamanders from entering these sites. Drift fencing will be installed and inspected by the biologist(s) no less than 72 hours prior to the first rain event of the rainy season. If weather conditions necessitate the installation of drift fencing, the approved biologist(s) will oversee the installation of pit traps to capture California tiger salamanders migrating during the rain events. The biologist(s) will check pit traps twice daily, once in the morning prior to the start of construction and once at the end of the work day.* *d. Any California tiger salamanders captured in pit traps or uncovered in burrows will be transferred immediately to a site designated by the USFWS and CDFW. Transported animals must be kept cool and moist.* *e. A post-construction report detailing compliance with the avoidance/minimization measures will be provided to the USFWS and CDFW within 90 calendar days of completion of the project. The report will include:* *i. Dates of project groundbreaking and completion.* *ii. Information concerning the success of the project in meeting minimization measures, such as the capture and offsite transport of*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		California tiger salamanders. *iii. An explanation of failure to meet such measures, if any.* *iv. Known project effects on the California tiger salamander.* *v. Observed incidences of injury to or mortality of the species.* *vi. Any other relevant information.* ***Mitigation Measure 3.2-3**: Prior to any construction activities, the project applicant shall consult with the USFWS for concurrence and a final confirmation that a take permit is not necessary for impacts to the California red-legged frog that is documented in the region, and has the potential to utilize the surrounding drainages. The regulatory agency concurrence confirmation shall be provided to the City of Salinas for the project file. If the regulatory agency do not concur that the project does not require a take permit, then the project applicant shall initiate a consultation with the agency and obtain the appropriate take permit.* ***Mitigation Measure 3.2-4**: To avoid and minimize impacts to CRLF to the extent feasible, the proposed project activities shall be compliant with the following Avoidance and Minimization Measures during Construction Activities:* *a. Prior to excavation work or other ground disturbance, a biologist(s) will conduct environmental education training for all construction personnel covering the California red-legged frog, the importance of avoiding adverse effects to the species. New personnel who are added to the project after the training is first conducted also will be required to be trained.* *b. The biologist(s) will monitor construction activities located in suitable habitat that is within the project footprint (Irrigation Ditch, Roadside Ditch).* *c. Prior to excavation work or other ground disturbance, a biologist(s) will*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		conduct environmental education training for all construction personnel covering the California red-legged frog, the importance of avoiding adverse effects to the species. New personnel who are added to the project after the training is first conducted also will be required to be trained. *d. The applicant will erect drift fencing around the work areas, prior to commencing work, to prevent California red-legged frog from entering the construction site. Drift fencing will be installed and inspected by the biologist(s).* *e. A post-construction report detailing compliance with the avoidance/minimization measures will be provided to the U.S. Fish and Wildlife Service within 90 calendar days of completion of the project. The report will include:* *vii. Dates of project groundbreaking and completion.* *viii. Information concerning the success of the project in meeting minimization measures, such as the capture and offsite transport of.* *ix. An explanation of failure to meet such measures, if any.* *x. Known project effects on the California red-legged frog.* *xi. Observed incidences of injury to or mortality of the species.* *xii. Any other relevant information.* *If proposed construction activities may result in the "take" (harass, harm, pursue, wound, kill, trap, or capture) of California red-legged frog or California tiger salamander, the project proponent shall obtain state and federal Incidental Take Permits, and comply with all stipulated conditions to protect special-status amphibians.*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.2-3: The proposed project has the potential to have direct or indirect effects on special-status bird species	PS	***Mitigation Measure 3.2-5****: If construction activities occur during the avian breeding season (February 15 – September 15) then the project proponent shall conduct pre-construction surveys to prevent impacts to nesting birds. No more than 15 days prior to the start of construction a bird survey shall be conducted by a qualified biologist to identify any active nests within the Specific Plan Area. If construction stops for a period of 15 days or more during the avian breeding season than an additional bird survey shall be conducted. The biologist will conduct a survey in the Specific Plan Area for all special-status birds protected by the federal and state ESA, MBTA and CFGC. The biologist shall map all nests that are within, and visible from, the Specific Plan Area. If nests are identified, the biologist shall develop buffer zones around active nests as deemed appropriate in coordination with the CDFW. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored at least twice per week and a report submitted to the City and CDFW monthly.*	LS
Impact 3.2-4: The proposed project has the potential to have direct or indirect effects on special-status fish species	LS	None required.	--
Impact 3.2-5: The proposed project has the potential to have direct or indirect effects on special-status mammal species	PS	***Mitigation Measure 3.2-6****: Fifteen days prior to construction activities within 200 feet of the residential complexes located along Natividad Road and San Juan Grade Road, the project applicant shall retain a biologist to perform a preconstruction survey for roosting special-status bats. The survey shall include a minimum of one daytime and one evening survey. The survey shall cover the trees, structures, and debris located within these complexes. If roosting activity is observed, removal of the tree or building shall be avoided if possible, during the roosting season. If avoidance is not feasible, a qualified biologist shall coordinate with the California Department of Fish and Wildlife to devise a strategy to safely evict the individuals or colonies.*	LS
Impact 3.2-6: The proposed project has the potential to have direct or indirect effects on candidate, sensitive, or special-status plant	LS	None required.	--

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
species			
Impact 3.2-7: The proposed project has the potential to have direct or indirect effects on protected wetlands and jurisdictional waters	PS	***Mitigation Measure 3.2-7****: Prior to any construction activities that would disturb the irrigation ditches and/or roadside ditches, the project applicant shall obtain a jurisdictional determination from the USACE and CDFW. If these regulatory agencies concur that these facilities are exempt, then no further mitigation is necessary. If it is determined that these facilities are not exempt, authorization for fill from the regulatory agencies (USACE-404 permit, RWQCB-401 certification, 1600 Streambed Alteration Agreement) will be necessary and a permit shall be adhered to throughout the construction phase.*	LS
Impact 3.2-8: The proposed project has the potential to have direct or indirect effects on riparian habitat or sensitive natural communities	LS	None required.	--
Impact 3.2-9: The proposed project has the potential to interfere with the movement of native fish or wildlife species or with established wildlife corridors, or impede the use of native wildlife nursery sites	PS	None feasible.	SU
Impact 3.2-10: The proposed project has the potential to conflict with an adopted Habitat Conservation Plan or Natural Community Conservation Plan	LS	None required.	--
Impact 3.2-11: The proposed project has the potential to conflict with local policies or ordinances protecting biological resources	LS	None required.	--

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.2-12: Cumulative loss of biological resources including habitats and special status species	PS	None feasible.	CC and SU
CULTURAL AND TRIBAL RESOURCES			
Impact 3.3-1: Project implementation may cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5	PS	***Mitigation Measure 3.3-1:*** *If cultural resources (i.e., prehistoric sites, historic sites, and isolated artifacts and features) are discovered during the course of construction within the Specific Plan Area or at off-site infrastructure improvement locations, work shall be halted immediately within 50 meters (165 feet) of the discovery, the City of Salinas shall be notified, and a qualified archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology shall be retained to determine the significance of the discovery.* *The City of Salinas shall consider mitigation recommendations presented by the qualified archaeologist for any unanticipated discoveries and shall carry out the measures deemed feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The project proponent shall be required to implement any mitigation necessary for the protection of cultural resources.*	LS
Impact 3.3-2: Project implementation may cause a substantial adverse change in the significance of archaeological resource pursuant to CEQA Guidelines §15064.5	PS	Implement Mitigation Measure 3.3-1	LS
Impact 3.3-3: Project implementation may directly or indirectly destroy a unique paleontological resource	PS	***Mitigation Measure 3.3-2:*** *If paleontological resources are discovered during the course of construction, work shall be halted immediately within 50 meters (165 feet) of the discovery, the City of Salinas shall be notified, and a qualified paleontologist shall be retained to determine the significance of the discovery. If the paleontological resource is considered significant, it should be excavated by a qualified paleontologist and given to a*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		local agency, State University, or other applicable institution, where they could be curated and displayed for public education purposes.	
Impact 3.3-4: Project implementation may disturb human remains, including those interred outside of formal cemeteries	PS	***Mitigation Measure 3.3-3**: If human remains are found during construction within the Specific Plan Area, or at off-site infrastructure improvement locations, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until a qualified archeological monitor and the coroner of Monterey County are contacted. If it is determined that the remains are Native American, the coroner shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent (MLD) from the deceased Native American. The MLD may then make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and associated grave goods as provided in Public Resources Code section 5097.98. The landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance if:* *a) the Native American Heritage Commission is unable to identify a MLD or the MLD failed to make a recommendation within 24 hours after being notified by the commission;* *b) the descendent identified fails to make a recommendation; or* *c) the landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.*	LS
Impact 3.3-5: The project may contribute to cumulative impacts on known and undiscovered cultural resources	LCC	None required.	--

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
GREENHOUSE GASES, CLIMATE CHANGE, AND ENERGY			
Impact 3.4-1: Potential to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment	PS	***Mitigation Measure 3.4-1****: Pursuant to CEQA Guidelines section 15183(5)(b), Plans for the Reduction of Greenhouse Gas Emissions, developers of future individual projects within the Plan Area shall prepare a Greenhouse Gas Reduction Plan (GGRP) aimed at achieving specific performance standards. The individual GGRPs shall include the following:* *1) The GGRP shall achieve a per capita operational emissions level of 1.94 MT CO_2e/service population/year by year 2035, and 0.80 MT CO_2e/service population/year by year 2050.* *2) Calculation of GHG emissions projection using an acceptable modeling tool such as the most recent version of CalEEMod.* *GHG reduction measures may include building and site energy reduction measures, measures to reduce project-generated vehicle miles traveled, or other measures. Off-site measures such as participation in a community-wide GHG reduction program(s), if any are adopted, or payment of GHG reduction fees (carbon offsets) into a qualified existing local program, if one is in place, may be considered after all feasible on-site reduction measures are considered. The effectiveness of the GHG reduction measures included in the GGRP must be verifiable based on evidence presented in the GGRP. Representative GHG reduction measures which may be considered may include, but are not limited to:* • *Measures identified by the California Air Pollution Control Officers' Association in Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures or updates to this document as may occur from time to time.* • *Measures identified in guidance from the air district, if any, and/or in guidance provided by other regional air districts such as the Bay Area Air Quality Management District, Sacramento Metropolitan Air Quality Management District, San Luis Obispo County Air Pollution Control District, or other agencies with adopted GHG reduction guidance that is applicable on the date the project*	SU

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		application is deemed complete by the City. *If sufficient feasible GHG reduction measures are unavailable to reduce GHG emissions to below the threshold of significance, the applicant shall include evidence in the GGRP to this effect. The GGRP shall be subject to review and approval of the City of Salinas Community Development Department prior to approval of the project-specific entitlements.* *Implementation of this mitigation measure shall not be required if the City has a qualified GHG reduction plan in place on the date a future individual project application is deemed complete, the qualified GHG reduction plan reflects the most recent legislatively-adopted GHG reduction targets (e.g., the 2030 target set by SB 32), includes an inventory of projected GHG emissions from development within the Plan Area, and includes GHG reduction measures applicable to development within the Plan Area whose implementation is required as a condition of approval of such projects.*	
Impact 3.4-2: Potential to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases	PS	Implement Mitigation Measure 3.4-1.	LS
Impact 3.4-3: Project implementation may result in the inefficient, wasteful, or unnecessary use of energy resources	LS	None required.	--
Impact 3.4-4: Cumulative impact on climate change from increased project-related greenhouse gas emission	PS	Implement Mitigation Measure 3.4-1.	CC and SU
HAZARDS AND HAZARDOUS MATERIALS			

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.5-1: Potential to be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment	PS	***Mitigation Measure 3.5-1***: *Prior to ground disturbance, or issuance of demolition permits, the applicant shall hire a qualified consultant to:* *1) Provide a final evaluation of the soils around the agricultural operations support buildings (residences, warehouses, barns, etc.) before they are demolished. If toxic levels of residual agrichemicals or surface staining are found, the contaminated soil shall be excavated and disposed of at an off-site disposal facility designed to accept such waste. Any contaminated areas shall be remediated by the project applicant in accordance with recommendations made by the Monterey County Health Department Hazardous Materials Management Services, Regional Water Quality Control Board, Department of Toxic Substances Control, or other appropriate federal, state, or local regulatory agencies.* *2) Investigate structures for asbestos-containing materials and lead. If asbestos-containing materials and/or lead are found in the buildings, a Cal-OSHA certified ACBM and lead based paint contractor shall be retained to remove the asbestos-containing materials and lead in accordance with EPA and California Occupational Safety and Health Administration (Cal/OSHA) standards. In addition, all activities (construction or demolition) in the vicinity of these materials shall comply with Cal/OSHA asbestos and lead worker construction standards. Any ACBM and lead shall be disposed of properly at an appropriate offsite disposal facility.* ***Mitigation Measure 3.5-2****: Prior to the issuance of grading permits existing water wells shall be destructed under permit from the Monterey County Health Department. Any destruction of these facilities shall be in accordance with the Monterey County Well Standards* for *Abandonment/Destruction. The project applicant shall provide the City of Salinas with a copy of the permit and a report or other information documenting the appropriate destruction of these facilities.* ***Mitigation Measure 3.5-3:*** *Prior to the issuance of occupancy permits, water wells shall be constructed and tested for water quality under permit from the Monterey County Health Department. The project applicant shall provide the City of Salinas with a copy of the permit and a report or other information documenting the appropriate construction*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		and operation of these facilities.	
Impact 3.5-2: Create a significant hazard to school sites due to siting or the placement of infrastructure	PS	***Mitigation Measure 3.5-4:*** *The property line of all school sites (even if it is a joint use agreement as described in subsection (o) of § 14010) shall be at least the following distance from the edge of respective power line easements as identified in the California Code of Regulations Title 5, Article 2. School Sites § 14010. Standards for School Site Selection (c).* • *100 feet for 50-133 kV line.* • *150 feet for 220-230 kV line.* • *350 feet for 500-550 kV line.*	LS
Impact 3.5-3: Cumulative impact related to hazards and hazardous materials	LCC	None required.	--
HYDROLOGY AND WATER QUALITY			
Impact 3.6-1: The proposed project has the potential to violate water quality standards or waste discharge requirements during construction	PS	**Mitigation Measure 3.6-1:** Prior to clearing, grading, and disturbances to the ground such as stockpiling, or excavation, the Project proponent shall submit a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) to the RWQCB to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ amended by 2010-0014-DWQ & 2012-0006-DWQ). The SWPPP shall be designed with Best Management Practices (BMPs) that the RWQCB has deemed as effective at reducing erosion, controlling sediment, and managing runoff. These include: covering disturbed areas with mulch, temporary seeding, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation, and permanent seeding. Sediment control BMPs, installing silt fences or placing straw wattles below slopes, installing berms and other temporary run-on and runoff diversions. These BMPs are only examples of what should be	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		considered and should not preclude new or innovative approaches currently available or being developed. Final selection of BMPs will be subject to approval by City of Salinas and the RWQCB. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the RWQCB.	
Impact 3.6-2: The proposed project has the potential to violate water quality standards or waste discharge requirements during operation	PS	***Mitigation Measure 3.6-2:*** *Prior to the approval of Improvement Plans, the project applicant shall submit to the Salinas Public Works Department detailed plans and calculations for water quality best management practices (BMPs) and water quality detention/retention basins designed to meet the prevailing regulatory requirements and to reduce contaminant loadings to receiving waters to the maximum extent practicable.* *The Improvement Plans shall be consistent with the City's NPDES permit requirements. The NPDES permit granted to the City of Salinas by the Central Coast RWQCB (CCRWQCB, 2012) requires the following:* *I. Erosion and Sediment Control BMPs – Erosion control and sediment control BMPs shall be designed, installed, and maintained to reduce the discharge of pollutants from construction sites to the maximum extent practical (MEP) and protect water quality;* *II. Erosion and sediment from slopes and channels shall be controlled by implementing an effective combination of erosion control (source control) and other sediment control BMPs; and* *III. Soil Stabilization – Stabilization of disturbed areas shall, at a minimum, be initiated immediately whenever any clearing, grading, excavating, or other earth disturbing activities have permanently ceased.* *Additionally, the Improvement Plans shall be consistent with the requirements of the City's Stormwater Standards for New and Redevelopment Projects. The City of Salinas Stormwater Standards for New and Redevelopment Projects (City of Salinas, 2013)*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		require the following practices: *I. Limit disturbance of creeks and natural drainage features and provide setbacks according to Permit Provision L.1.d;* *II. Minimize compaction of highly permeable soils; and* *III. Limit clearing and grading of native vegetation to the minimum needed to build the project and provide fire protection.* ***Mitigation Measure 3.6-3:*** *Prior to the approval of Improvement Plans, the project applicant shall submit to the Salinas Public Works Department detailed plans and calculations for water quality best management practices (BMPs) and water quality detention basins designed to prevent to the maximum extent practicable the creation of new sources of polluted runoff. The detailed plans shall be subject to review and approval by the Salinas Public Works Department.* ***Mitigation Measure 3.6-4:*** *Prior to the approval of Improvement Plans, the project applicant shall submit to the Salinas Public Works Department detailed plans and calculations for detention/ retention basins and flow reducing BMPs designed to meet regulatory requirements and to reduce peak flows during storm events below peak flows under pre-project conditions. The detailed plans shall be subject to review and approval by the Salinas Public Works Department.*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.6-3: The proposed project has the potential to substantially deplete groundwater supplies or interfere substantially with groundwater recharge	PS	***Mitigation Measure 3.6-5:*** *Prior to the approval of Improvement Plans, the project applicant shall design, site, and install stormwater retention/infiltration basins and infiltration promoting BMPs that are similar to published plans and sufficient to assure that there is no reduction in groundwater recharge. The stormwater plan shall be reflected on the Improvement Plans, subject to review and approval by the Salinas Public Works Department.* ***Mitigation Measure 3.6-6:*** *Prior to the approval of Improvement Plans, the project applicant shall design, site, and install stormwater detention basins and BMPs in accordance with City of Salinas stormwater development standards. Maintenance procedures and funding mechanisms shall be established for those facilities to assure adequate performance in treating the water and controlling infiltration into the groundwater. The Improvement Plans shall be subject to review and approval by the Salinas Public Works Department.*	LS
Impact 3.6-4: The proposed project has the potential to alter the existing drainage pattern in a manner which would result in substantial erosion, siltation, flooding, or polluted runoff	LS	None required.	--
Impact 3.6-5: The proposed project has the potential to otherwise substantially degrade water quality	LS	None required.	--
Impact 3.6-6: Place housing or structures that would impede/redirect flows within a 100-year, or 200-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map	LS	None required.	--

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.6-7: The proposed project has the potential to expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, seiche, tsunami, or mudflow	LS	None required.	--
Impact 3.6-8: Cumulative increases in peak stormwater runoff from the plan area	LCC	None required.	--
Impact 3.6-9: Cumulative impacts related to degradation of water quality	LCC	None required.	--
Impact 3.6-10: Cumulative impacts related to degradation of groundwater supply or recharge	LCC	None required.	--
Impact 3.6-11: Cumulative impacts related to flooding	LCC	None required.	--
NOISE			
Impact 3.7-1: The proposed project has the potential to increase traffic noise levels at existing receptors	PS	***Mitigation Measure 3.7-1:*** *The project applicant shall consider repaving roadway segments which result in significant increases in traffic noise with alternative pavements. These repaving projects shall only occur where existing residential uses are adjacent to the roadways, when they are located inside of the 60 dB L_{dn} contours shown in Tables 3.7-8 through 3.7-11, or when they exceed the FICON criteria. Sixty dB L_{dn} is considered an acceptable exterior noise level standard.* ***Under the Existing and Existing Plus Project*** *scenario (Table 3.7-8), Natividad Road, south of East Boronda, experiences a significant increase in traffic noise levels and the use*	SU

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		of alternative pavements would result in a less than significant increase in noise levels. The project does not result in noise levels which exceed the 60 dB L_{dn} standard at residences which currently are below 60 dB L_{dn}. ***Under the Existing and Existing Plus Project + CASP*** *scenario (Table 3.7-9), Natividad Road, south of East Boronda, experiences a significant increase in traffic noise levels and the use of alternative pavements would result in a less than significant increase in noise levels. The project does not result in noise levels which exceed the 60 dB L_{dn} standard at residences which currently are below 60 dB L_{dn}.* ***Under the Cumulative and Cumulative Plus Project*** *scenario (Table 3.7-10), the following roadway segments would experience a significant increase in traffic noise levels:* • *East Boronda Road (San Juan Grade to McKinnon);* • *East Boronda Road (Independence to Hemmingway);* • *East Boronda Road (N. Sanborn to Williams); and* • *Natividad Road (South of East Boronda).* *The use of alternative pavements would result in a less than significant increase in noise levels. The project does not result in noise levels which exceed the 60 dB L_{dn} standard at residences which currently are below 60 dB L_{dn}.* ***Under the Cumulative and Cumulative Plus Project + CASP*** *scenario (Table 3.7-11), the following roadways experience a significant increase in traffic noise levels:* • *Constitution Boulevard (South of E. Boronda);* • *East Boronda Road (N. Main to San Juan Grade);*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		• *East Boronda Road (El Dorado to Natividad);* • *East Boronda Road (Natividad to Independence);* • *East Boronda Road (Independence to Hemmingway);* • *East Boronda Road (Hemmingway to Constitution);* • *East Boronda Road (N. Sanborn to Williams);* • *Natividad Road (South of E. Boronda);* • *Natividad Road (E. Boronda to Future Russel Road); and* • *Russel Road (West of San Juan Grade).* *The use of alternative pavements would result in a less than significant increase in noise levels. The project would result in noise levels which exceed the 60 dB L_{dn} standard at residences which currently are below 60 dB L_{dn} at both E. Boronda Road (Hemmingway to Constitution) and E. Boronda (N. Sanborn to Williams). The use of alternative pavements would result in a less than significant increase in noise levels and reduce traffic noise levels to less than 60 dB L_{dn}.*	
Impact 3.7-2: The proposed project has the potential to increase noise levels associated with construction activities	PS	***Mitigation Measure 3.7-2:*** *Construction activities shall adhere to the requirements of the City of Salinas Municipal Code with respect to hours of operation. This requirement shall be noted in the improvements plans prior to approval by the City's Public Works Department.* ***Mitigation Measure 3.7-3:*** *All equipment shall be fitted with factory equipped mufflers and in good working order. This requirement shall be noted in the improvements plans prior to approval by the City's Public Works Department.*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.7-3: The proposed project has the potential to increase noise vibration association with construction activities	LS	None required.	--
Impact 3.7-4: The proposed project has the potential to expose new sensitive receptors to excessive transportation noise	PS	***Mitigation Measure 3.7-4:*** *Six- to ten-foot tall sound walls and/or landscaped berm combinations shall be constructed along the primary Plan Area roadways, adjacent to proposed residential uses, in order to achieve the City's exterior noise standards. At the City's discretion, wall heights which achieve the City's conditionally acceptable 60-70 dB L_{dn} noise standard may be allowed. See the Draft EIR Table 3.7-14 for specific noise barrier heights along each roadway. Noise barrier walls shall be constructed of concrete panels, concrete masonry units, earthen berms, or any combination of these materials. Wood is not recommended due to eventual warping and degradation of acoustical performance. These requirements shall be included in the improvements plans prior to their approval by the City's Public Works Department.* ***Mitigation Measure 3.7-5:*** *The first row of residential uses located along E. Boronda Road and Natividad Road shall include windows having a Sound Transmission Class (STC) 35, or higher, rating installed in second floor facades. Exterior walls shall also require 3-coat stucco and RC-channels. The exterior wall specifications would specifically apply to the first row of homes and does not apply to facades facing away from the roadway. A detailed analysis of any additional interior mitigation measures shall be conducted when building plans are available to verify these requirements. These requirements shall be included in the improvements plans prior to approval by the City's Public Works Department.* ***Mitigation Measure 3.7-6:*** *Mechanical ventilation shall be installed in all residential uses to allow residents to keep doors and windows closed, as desired for acoustical isolation. This requirement shall be included in the improvements plans prior to approval by the City's Public Works Department.*	LS
Impact 3.7-5: The proposed project has the potential to expose sensitive receptors to	PS	***Mitigation Measure 3.7-7:*** *Minimum 6-foot tall sound walls and/or landscaped berms shall be constructed where a park or school site abuts a residential use. No wall shall be*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
substantial noise from proposed park and school uses		*required where residential uses are fronted towards a park or school site and separated by a roadway. Noise barrier walls shall be constructed of concrete panels, concrete masonry units, earthen berms, or any combination of these materials. Wood is not recommended due to eventual warping and degradation of acoustical performance. This requirement shall be included in the improvements plans prior to approval by the City's Public Works Department.*	
Impact 3.7-6: The proposed project has the potential to expose sensitive receptors to substantial noise from proposed commercial mixed-uses	PS	***Mitigation Measure 3.7-8:*** *Where commercial, business professional, office, or similar uses abut residential uses or where loading docks or truck circulation routes face residential areas, the following measures shall be included in the Project design:* • *All HVAC equipment shall be located within mechanical rooms where possible or shielded from view with solid barriers;* • *Emergency generators shall comply with the City's noise criteria at the nearest noise-sensitive receivers;* • *Delivery/loading activities shall comply with the City of Salinas Zoning Ordinance standards; and* • *The applicant shall submit a noise study to verify that the appropriate noise control measures have been incorporated into the project design and will achieve compliance with the City's noise level standards.* *These requirements shall be included in the improvements plans prior to their approval by the City's Public Works Department.*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.7-7: The proposed project has the potential to expose sensitive receptors to substantial noise from proposed well sites	PS	***Mitigation Measure 3.7-9:*** *The well sites shall be designed and built to not exceed a noise level of 55 dB L_{eq} at the nearest residential property line during normal operation of the stations. Generators shall not exceed the City's daytime noise standard of 60 dB L_{eq}. Generators shall be tested only during daytime hours. This requirement shall be included in the improvements plans prior to approval by the City's Public Works Department*	LS
Impact 3.7-8: Cumulative exposure of existing and future noise-sensitive land uses to increased noise resulting from cumulative development	PS	None feasible.	CC and SU
POPULATION AND HOUSING			
Impact 3.8-1: The proposed Project has the potential to induce substantial population growth in an area	LS	None required.	--
Impact 3.8-2: Cumulative impact on the potential to induce substantial population growth in an area	LCC	None required.	--
PUBLIC SERVICES			
Impact 3.9-1: The proposed project may result in effects on fire department staffing, fire response times, or has the potential to require the construction of fire department facilities which may cause substantial adverse physical environmental impacts	PS	***Mitigation Measure 3.9-1:*** *Prior to the issuance of Certificates of Occupancy, the applicant shall pay all applicable project impact fees per the impact fee schedule.*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.9-2: The proposed project may result in effects on police staffing, or has the potential to require the construction of police department facilities which may cause substantial adverse physical environmental impacts	LS	None required.	--
Impact 3.9-3: Project implementation may result in effects on schools, or has the potential to require the construction of school facilities which may cause substantial adverse physical environmental impacts	PS	***Mitigation Measure 3.13-2:*** *Prior to the issuance of a building permit, the applicant shall pay applicable school fees mandated by SB 50 to the Salinas Union High School District (SUHSD), and Santa Rita Union School District (SRUSD).*	LS
Impact 3.9-4: Project implementation may result in effects on parks, or has the potential to require the construction of park facilities which may cause substantial adverse physical environmental impacts	LS	None required.	--
Impact 3.9-5: Project implementation may result in effects on other public facilities	LS	None required.	--
Impact 3.9-6: Under cumulative conditions the proposed project may result in effects on public facilities	LCC	None required.	--
TRANSPORTATION AND CIRCULATION			
Impact 3.10-1: Under Existing Plus Project conditions, implementation of the proposed Specific Plan would conflict with the	PS	***Mitigation Measure 3.10-1****: The project applicant shall provide the funding for the installation of a traffic signal at San Juan Grade Road/Van Buren Avenue, prior to approval of final improvement plans. The final improvement plans shall note this*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
performance measures established by the City of Salinas, Monterey County, and Caltrans		*improvement.* ***Mitigation Measure 3.10-2****: The project applicant shall provide the funding for the optimization of the existing signal timing at San Juan Grade Road/East Boronda Road, prior to approval of final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-3****: The project applicant shall provide the funding for the signalization of the intersection at Hemingway Drive/East Boronda Road, prior to approval of final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-4****: The project applicant shall provide the funding for the optimization of existing signal timings at North Main Street/Laurel Drive, prior to approval of final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-5****: The project applicant shall provide the funding for the widening of the intersection at Natividad Road/East Laurel Drive to add additional northbound and southbound through lanes, prior to final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-6****: The project applicant shall provide the funding for the installation of a traffic signal at the intersection of North Sanborn Road/Boronda Road, prior to final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-7****: The project applicant shall provide the funding for the optimization of existing signal timings and to add an eastbound left turn pocket at the intersection of Sherwood Drive/Natividad Road & East Bernal Drive/La Posada Way, prior to final improvement plans. This mitigation includes the addition of an eastbound left turn pocket and optimization of the existing signal timing to better accommodate the*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		expected changes in traffic distribution and volume with implementation of the proposed project. The final improvement plans shall note this improvement. ***Mitigation Measure 3.10-8****: The project applicant shall provide the funding for the addition a southbound left turn lane and optimization of the traffic signal's timing at the intersection of Salinas Street/North Main Street/West Market Street/East Market Street, prior to final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-9****: The project applicant shall contribute to the Transportation Agency for Monterey County (TAMC) Regional Development Impact Fee (RDIF) Program and the City of Salinas' Traffic Impact Fee (TIF) Program, as determined by the TAMC and the City of Salinas, respectively. These programs include improvements to U.S. 101 that would improve mainline and ramp junction operations, which would mitigate the proposed project's impact to the U.S. 101 ramp junctions affected by the proposed project (i.e. the Northbound Road Off-Ramp and Northbound West Laurel Drive Off-Ramp).*	
Impact 3.10-2: Under Existing Plus Project and Central Area Specific Plan conditions, implementation of the proposed Specific Plan may conflict with the performance measures established by the City of Salinas, Monterey County, and Caltrans	PS	***Mitigation Measure 3.10-10:*** *The project applicant shall provide funding to optimize the existing traffic signal timing and splits at intersection of North Main Street/East Boronda Road, prior to final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-11:*** *The project applicant shall provide funding to convert the eastbound right turn lane to a shared through-right turn lane at Natividad Road/East Laurel Drive, prior to final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-12:*** *The project applicant shall provide funding for addition of an eastbound right turn pocket at the intersection of North Sanborn Road/Boronda Road, prior to final improvement plans. The final improvement plans shall note this improvement.*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		Mitigation Measure 3.10-13: *The project applicant shall provide funding for the installation of a traffic signal at the intersection of Williams Road/East Boronda Road, prior to final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-14:*** *The project applicant shall provide funding to optimize the existing traffic signal timing and splits at the South Sanborn/North Sanborn/John Street intersection, prior to final improvement plans. The final improvement plans shall note this improvement.*	
Impact 3.10-3: Under Cumulative Plus Project conditions, implementation of the proposed Specific Plan may conflict with the performance measures established by the City of Salinas, Monterey County, and Caltrans	PS	***Mitigation Measure 3.10-15****: The project applicant shall provide its fair-share contribution for the installation of a traffic signal at intersection of U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road, prior to final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-16****: The project applicant shall provide its fair-share contribution for the installation of a traffic signal at intersection of U.S. 101 Northbound Ramps/Crazy Horse Canyon Road, prior to final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-17****: The project applicant shall provide its fair-share contribution for the installation of a traffic signal at intersection of Crazy Horse Canyon Road/San Juan Grade Road, prior to final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-18****: The project applicant shall provide its fair-share contribution for the installation of a traffic signal at intersection of Natividad Road/Rogge Road, prior to final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-19****: The project applicant shall provide its fair-share contribution for the installation of a traffic signal at intersection of Natividad Road/Russell Road, prior to final improvement plans. The final improvement plans shall*	CC and SU

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		note this improvement. ***Mitigation Measure 3.10-20**: The project applicant shall provide its fair-share contribution for the installation of southbound and westbound left turn lanes at the intersection of North Main Street/East Boronda Road, prior to final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-21**: The project applicant shall provide its fair-share contribution for the installation of a southbound left turn lane at the intersection of Constitution Boulevard/East Laurel Drive, prior to final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-22**: The project applicant shall provide its fair-share contribution for the installation of a traffic signal at intersection of Old Stage Road/Williams Road/Private Road, prior to final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-23**: The project applicant shall provide its fair-share contribution for the installation of a northbound through lane, the addition of a northbound right turn overlap phase, and the conversion of the westbound through lane to a westbound shared through-left turn lane at the intersection of North Main Street/East Bernal Drive, prior to final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-24**: The project applicant shall provide its fair-share contribution for the installation of a northbound and southbound through lanes at the intersection of Sherwood Drive/Natividad Road & East Bernal Drive/La Posada Way, prior to final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-25**: The project applicant shall provide its fair-share contribution for the installation of a westbound left turn lane at the intersection of South Davis Road/Blanco Road, prior to final improvement plans. The final improvement plans shall note this improvement.*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		Mitigation Measure 3.10-26*: The project applicant shall provide its fair-share contribution for the installation of an eastbound left turn lane and a southbound left turn lane at the intersection of Salinas Street/North Main Street/West Market Street/East Market Street, prior to final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-27****: The project applicant shall provide its fair-share contribution for the installation of a northbound left turn lane at the intersection of South Main Street/West Blanco Road/East Blanco Road, prior to final improvement plans. The final improvement plans shall note this improvement.* **Mitigation Measure 3.10-28**: The project applicant shall provide its fair-share contribution for the installation of a northbound left turn lane at the intersection of South Main Street/West Blanco Road/East Blanco Road, prior to final improvement plans. The final improvement plans shall note this improvement.	
Impact 3.10-4: Under Cumulative Plus Project with Central Area Specific Plan conditions, implementation of the proposed Specific Plan may conflict with the performance measures established by the City of Salinas, Monterey County, and Caltrans	PS	***Mitigation Measure 3.10-29****: The project applicant shall provide its fair-share contribution for the installation of a traffic signal at intersection of Old Stage Road/Hebert Road, prior to final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-30****: The project applicant shall provide its fair-share contribution for the installation of northbound and southbound through lanes and for the conversion of the existing eastbound right turn lane to a shared through-right turn lane, prior to final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-31****: The project applicant shall provide its fair-share contribution for the installation of eastbound and southbound left turn lanes at Constitution Boulevard/East Laurel Drive, prior to final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-32****: The project applicant shall provide its fair-share*	CC and SU

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		contribution for the installation of a westbound left turn lane at the intersection of North Sanborn Road/Boronda Road, prior to final improvement plans. The final improvement plans shall note this improvement. ***Mitigation Measure 3.10-33****: The project applicant shall provide its fair-share contribution for the installation of an eastbound left turn lane at Williams Road/East Boronda Road, prior to final improvement plans. The final improvement plans shall note this improvement.* ***Mitigation Measure 3.10-34****: The project applicant shall provide its fair-share contribution for the installation of a southbound left turn lane at the intersection of East Front Street/Sherwood Drive/Market Street, prior to final improvement plans. The final improvement plans shall note this improvement.*	
Impact 3.10-5: Implementation of the proposed Specific Plan would not result in changes to air traffic patterns	LS	None required.	--
Impact 3.10-6: Implementation of the proposed Specific Plan would not substantially increase hazards due to a design feature	LS	None required.	--
Impact 3.10-7: Implementation of the proposed Specific Plan would not result in impacts related to emergency access	LS	None required.	--
Impact 3.10-8: Implementation of the proposed Specific Plan would not conflict with adopted multi-modal circulation policies, plans, or programs, and would not decrease the performance or safety of public transit,	PS	***Mitigation Measure 3.10-35****: Prior to the start of operation of any buildings within the Plan Area, the project applicant shall either (1) work with Monterey-Salinas Transit to provide adequate funding implement a branch of Route 49 that operates at certain times of day such that it can accommodate students travelling to the planned high school on Russell Road, or (2) provide a special time-of-day school-oriented transit service that would provide alternative means for students to travel to and from school. Such a branch*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
bicycle, or pedestrian facilities		*would also provide service between the high school and the nearby Northridge Mall.* ***Mitigation Measure 3.10-36****: Prior to the start of construction, the project applicant shall work with the City of Salinas to determine the potential viability of installation of enhanced shelters at some bus stops to improve the conditions for transit riders who are waiting for a bus – such as on Russell Road, East Boronda Road and McKinnon Street (adjacent from existing school), and Boronda and Independence Boulevard (adjacent from existing school).*	
UTILITIES			
Impact 3.11-1: The proposed project has the potential to exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board	LS	None required.	--
Impact 3.11-2: The proposed project has the potential to result in a determination by the wastewater treatment and/or collection provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments	PS	***Mitigation Measure 3.11-1:*** *Prior to occupancy of the any building that would require wastewater treatment services, the project proponent shall secure adequate wastewater treatment capacity. The project proponent shall provide the City with documentation of a will-serve or other commitment from the agency providing wastewater treatment. Additionally, the project proponent would be required to install/connect the necessary collection/transmission infrastructure to ensure the appropriate treatment of all wastewater.*	LS
Impact 3.11-3: The proposed project has the potential to require or result in the construction of new wastewater treatment or collection facilities or expansion of existing facilities, the construction of which could	LS	None required.	--

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
cause significant environmental effects			
Impact 3.11-4: Cumulative impact on wastewater utilities (Less than Significant and Less than Cumulatively Considerable)	LCC	None required.	LS
Impact 3.11-5: The proposed project has the potential to require construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	LS	None required.	--
Impact 3.11-6: The proposed project has the potential to have insufficient water supplies available to serve the project from existing entitlements and resources	LS	None required.	--
Impact 3.11-7: Cumulative Impact on Water Utilities	LCC	None required.	LS
Impact 3.11-8: The proposed project has the potential to require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	LS	None required.	--
Impact 3.11-9: Cumulative Impact on Stormwater Facilities	LCC	None required.	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.11-10: The proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs and comply with federal, State, and local statutes and regulations related to solid waste	LS	None required.	--
Impact 3.11-11: Cumulative Impact on Solid Waste Facilities	LCC	None required.	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

Chapters **Page Numbers**

Executive Summary..... ES-1

1.0 Introduction 1.0-1

1.1 Purpose and Intended Uses of the EIR 1.0-1

1.2 Type of EIR 1.0-2

1.3 Known Responsible and Trustee Agencies 1.0-2

1.4 Environmental Review Process..... 1.0-3

1.5 Organization and Scope 1.0-4

1.6 Comments Received on the Notice of Preparation 1.0-6

2.0 Project Description 2.0-1

2.1 Project Location and Setting..... 2.0-1

2.2 Project Goals and Objectives 2.0-4

2.3 Project Description 2.0-5

2.4 Uses of the EIR and Required Agency Approvals..... 2.0-20

3.1 Air Quality 3.2-1

3.1.1 Environmental Setting 3.1-1

3.1.2 Regulatory Setting 3.1-9

3.1.3 Impacts and Mitigation Measures 3.1-14

3.2 Biological Resources 3.2-1

3.2.1 Environmental Setting 3.2-2

3.2.2 Regulatory Setting 3.2-20

3.2.3 Impacts and Mitigation Measures 3.2-15

3.3 Cultural Resources 3.3-1

3.3.1 Environmental Setting 3.3-1

3.3.2 Regulatory Setting 3.3-7

3.3.3 Impacts and Mitigation Measures 3.3-11

3.4 Greenhouse Gases, Climate Change, and Energy..... 3.4-1

3.4.1 Environmental Setting 3.4-1

3.4.2 Regulatory Setting 3.4-6

3.4.3 Impacts and Mitigation Measures 3.4-15

3.5 Hazards and Hazardous Materials 3.5-1

3.5.1 Environmental Setting 3.5-1
3.5.2 Regulatory Setting 3.5-18
3.5.3 Impacts and Mitigation Measures 3.5-21

3.6 Hydrology and Water Quality 3.6-1
3.6.1 Environmental Setting 3.6-1
3.6.2 Regulatory Setting 3.6-9
3.6.3 Impacts and Mitigation Measures 3.6-16

3.7 Noise 3.7-1
3.7.1 Environmental Setting 3.7-1
3.7.2 Regulatory Setting 3.7-7
3.7.3 Impacts and Mitigation Measures 3.7-12

3.8 Population and Housing 3.8-1
3.8.1 Environmental Setting 3.8-1
3.8.2 Regulatory Setting 3.8-4
3.8.3 Impacts and Mitigation Measures 3.8-9

3.9 Public Services 3.9-1
3.9.1 Environmental Setting 3.9-1
3.9.2 Regulatory Setting 3.9-7
3.9.3 Impacts and Mitigation Measures 3.9-14

3.10 Transportation and Circulation 3.10-1
3.10.1 Regulatory Setting 3.10-1
3.10.2 Methodology 3.10-6
3.10.3 Transportation Setting 3.10-7
3.10.4 Existing Conditions 3.10-13
3.10.5 No Project Conditions 3.10-16
3.10.6 Project Conditions 3.10-22

3.11 Utilities 3.11-1
3.11.1 Wastewater 3.11-1
Existing Setting 3.11-1
Regulatory Setting - Wastewater 3.11-6
Impacts and Mitigation Measures 3.11-9
3.11.2 Water Supplies 3.11-15
Existing Setting 3.11-15

Regulatory Setting – Water Supplies....3.11-24
Impacts and Mitigation Measures....3.11-27
3.11.3 Stormwater....3.11-33
Existing Setting....3.11-33
Regulatory Setting - Stormwater....3.11-36
Impacts and Mitigation Measures....3.11-46
3.11.4 Solid Waste....3.11-51
Existing Setting....3.11-51
Regulatory Setting – Solid Waste....3.11-52
Impacts and Mitigation Measures....3.11-53

4.0 Other CEQA-Required Topics....4.0-1
4.1 Cumulative Setting and Impact Analysis....4.0-1
4.2 Significant Irreversible Effects....4.0-26
4.3 Significant and Unavoidable Impacts....4.0-27

5.0 Alternatives to the Proposed Project....5.0-1
5.1 CEQA Requirements....5.0-1
5.2 Alternatives Considered in this EIR....5.0-3
5.3 Environmental Analysis....5.0-8

6.0 Report Preparers....6.0-1

7.0 References....7.0-1

Tables **Page Numbers**

Table ES-1: Comparison Summary of Alternatives Project Impacts to the WASP....ES-4
Table ES-2: West Area Specific Plan Impacts and Proposed Mitigation Measures....ES-5
Table 2-1: West Area Specific Plan Property Ownership....2.0-1
Table 2-2: West Area Specific Plan Residential Development Program....2.0-12
Table 2-3: West Area Specific Plan Non-residential Development Program....2.0-13
Table 2-4: Water Demand Estimate (acre-feet per year)....2.0-16
Table 2-5: Sewer Generation Estimate....2.0-17
Table 2-6: Estimated Electricity Demand....2.0-18
Table 2-7: Estimated Natural Gas Demand....2.0-18
Table 2-8: Estimated Solid Waste Generation....2.0-19
Table 3.1-1: Federal and State Ambient Air Quality Standards....3.1-5
Table 3.1-2: State and National Attainment Status....3.1-6
Table 3.1-3 NCCAB Ambient Air Quality Monitoring Data Summary - Ozone....3.1-7
Table 3.1-4 NCCAB Ambient Air Quality Monitoring Data Summary - $PM_{2.5}$....3.1-7

Table 3.1-5: NCCAB Ambient Air Quality Monitoring Data Summary - PM_{10} 3.1-7
Table 3.1-6: Ambient Air Quality Monitoring Data (Carmel Valley – Ford Road) 3.1-8
Table 3.1-7: Ambient Air Quality Monitoring Data (King City – 415 Pearl Street) 3.1-8
Table 3.2-8: Ambient Air Quality Monitoring Data (Salinas - #3) 3.1-8
Table 3.1-9: Operational Project Generated Emissions at Full Buildout 3.1-18
Table 3.1-10: Operational Project Generated Emissions (Year 2019 with 20% of Buildout) ... 3.1-19
Table 3.1-11: PM10 Construction Emissions 3.1-22
Table 3.1-12: CARB Minimum Separation Recommendations on Siting Sensitive Land Uses. 3.1-25
Table 3.2-1: USDA Soil Series Information 3.2-7
Table 3.2-2: Special-Status Plant Species Which May Occur in Specific Plan Area 3.2-9
Table 3.2-3: Special-Status Wildlife and Fish Species Which May Occur in Specific Plan Area 3.2-13
Table 3.4-1: Construction GHG Emissions (Unmitigated Average MT CO_2e/year) 3.4-22
Table 3.4-2: Operation GHG emissions 2035 (Unmitigated Metric Tons/Year) 3.4-23
Table 3.4-3: Operational GHG Emissions 2035 (Mitigated Metric Tons/Year) 3.4-23
Table 3.4-4: Operational GHG Emissions 2050 (Unmitigated Metric Tons/Year) 3.4-24
Table 3.4-5: Operational GHG Emissions 2050 (Mitigated Metric Tons/Year) 3.4-24
Table 3.4-6: Natural Gas Use and GHG Emissions by Land Use in 2035 ..... 3.4-32
Table 3.4-7: Electricity Use and GHG Emissions by Land Use in 2035 ..... 3.4-33
Table 3.4-8: On-road Mobile Fuel Generated by Project Construction Activities – By Phase 3.4-35
Table 3.4-9: WASP LEED Measures 3.4-36
Table 3.5-1: Environmental Data Resources 3.5-4
Table 3.5-2: Offsite Environmental Records 3.5-5
Table 3.5-3: Summary of Aerial Photography Observations 3.5-14
Table 3.5-4: Topographic Maps Evaluation 3.5-15
Table 3.6-1: State of California Watershed Hierarchy Naming Convention 3.6-2
Table 3.7-1: Typical Noise Levels 3.7-3
Table 3.7-2: Summary of Existing Background Noise Measurement Data 3.7-5
Table 3.7-3: Existing Traffic Noise Levels 3.7-6
Table 3.7-4: Exterior Noise Standards 3.7-9
Table 3.7-5: Noise/Land Use Compatibility Matrix 3.7-9
Table 3.7-6: Effects of Vibration on People and Buildings 3.7-12
Table 3.7-7: Significance of Changes in Noise Exposure 3.7-13
Table 3.7-8: Existing and Existing Plus Project Traffic Noise Levels 3.7-14
Table 3.7-9: Existing and Existing Plus Project + CASP Traffic Noise Levels 3.7-15
Table 3.7-10: Cumulative and Cumulative Plus Project Traffic Noise Levels 3.7-16
Table 3.7-11: Cumulative and Cumulative Plus Project + CASP Traffic Noise Levels 3.7-18
Table 3.7-12: Construction Equipment Noise 3.7-23
Table 3.7-13: Vibration Levels for Varying Construction Equipment 3.7-24
Table 3.7-14: Cumulative + Project Trans. Noise Levels at Proposed Residential Uses 3.7-25
Table 3.7-15: Cumulative and Cumulative Plus Project Traffic Noise Levels 3.7-30

Table 3.7-16: Cumulative and Cumulative Plus Project + CASP Traffic Noise Levels 3.7-31
Table 3.8-1: Population Growth and Growth Forecast 3.8-4
Table 3.8-2: Housing Unit Growth 3.8-4
Table 3.9-1: Salinas Police Department Call/Service Stats (2012-2014) 3.9-2
Table 3.9-2: Salinas Police Department Crime Stats (2012-2014) 3.9-2
Table 3.9-3: Salinas Police Department Arrest Statistics (2012-2014) 3.9-3
Table 3.9-4: Santa Rita Union School District: School Inventory & 2015/2016 Enrollment 3.9-4
Table 3.9-5: Salinas Union High School District: School Inventory & 2015/2016 Enrollment .. 3.9-5
Table 3.9-6: City of Salinas Community/Recreation Facilities Buildings 3.9-7
Table 3.9-7: Projected Plan Area Student Generation Estimates 3.9-18
Table 3.10-1: Intersection LOS Criteria 3.10-7
Table 3.10-2: Existing Transit Service 3.10-13
Table 3.10-3: Existing with No Project Intersection Level of Service 3.10-16
Table 3.10-4: AM Existing with No Project Freeway Mainline Operation Analysis 3.10-20
Table 3.10-5: PM Existing with No Project Freeway Mainline Operation Analysis 3.10-21
Table 3.10-6: AM Existing with No Project Ramp Junction Merge and Diverge analysis 3.10-22
Table 3.10-7: PM Existing with No Project Ramp Junction Merge and Diverge Analysis 3.10-22
Table 3.10-8: WASP Trip Generation 3.10-28
Table 3.10-9: CASP Trip Generation 3.10-29
Table 3.10-10: Summary of Existing Plus Project Peak Hour Intersection LOS 3.10-33
Table 3.10-11: AM Existing with No Project Freeway Mainline Operation Analysis 3.10-36
Table 3.10-12: PM Existing plus Project Freeway Mainline Operation Analysis 3.10-37
Table 3.10-13: AM Existing plus Project Ramp Junction Merge and Diverge Analysis 3.10-38
Table 3.10-14: PM Existing plus Project Ramp Junction Merge and Diverge Analysis 3.10-38
Table 3.10-15: Existing plus Project and CASP Intersection Level of Service Analysis 3.10-43
Table 3.10-16: AM Existing plus Project and CASP Freeway Mainline Operation Analysis ... 3.10-46
Table 3.10-17: PM Existing plus Project & CASP Freeway Mainline Operation Analysis..... 3.10-47
Table 3.10-18: AM Existing plus Project & CASP Ramp Junction Merge & Diverge Analysis. 3.10-47
Table 3.10-19: PM Existing plus Project & CASP Ramp Junction Merge & Diverge Analysis. 3.10-48
Table 3.10-20: Cumulative plus Project Intersection Operation Analysis 3.10-52
Table 3.10-21: AM Cumulative plus Project Freeway Mainline Operation Analysis 3.10-55
Table 3.10-22: PM Cumulative plus Project Freeway Mainline Operation Analysis..... 3.10-56
Table 3.10-23: AM Cumulative plus Project Ramp Junction Merge and Diverge Analysis.... 3.10-57
Table 3.10-24: PM Cumulative plus Project Ramp Junction Merge and Diverge Analysis 3.10-58
Table 3.10-25: Cumulative plus Project and CASP Intersection Operation Analysis 3.10-64
Table 3.10-26: AM Cumulative plus Project & CASP Freeway Mainline Operation Analysis 3.10-67
Table 3.10-27: PM Cumulative plus Project & CASP Highway Mainline Operation Analysis 3.10-68
Table 3.10-28: AM Cum. plus Project & CASP Ramp Junction Merge & Diverge Analysis 3.10-69
Table 3.10-29: PM Cum. plus Project and CASP Ramp Junction Merge & Diverge Analysis 3.10-69

Table 3.11-1: WDR Recycled Effluent Discharge Limitations 3.11-3
Table 3.11-2: Effluent Limitations for the Protection of Marine Aquatic Life 3.11-4
Table 3.11-3: Effluent Limitations for the Protection of Human Health 3.11-4
Table 3.11-4: Proposed Project Sewer Generation Estimate 3.11-6
Table 3.11-5: Summary of Recommended Sanitary Sewer Improvements 3.11-6
Table 3.11-6: Salinas WASP Average Annual Water Demand (AFY) 3.11-17
Table 3.11-7: Cal Water Salinas District Average Annual Daily Per Capita Water Use 3.11-19
Table 3.11-8: Groundwater Pumping – City of Salinas AFY 3.11-22
Table 3.11-9: Supply Capacity Versus Demand for Normal, Single, & Multiple Dry Years 3.11-22
Table 3.11-10: 3rd Dry Year: Supply Capacity versus Demand (AFY) 3.11-23
Table 3.11-11: Supply Capacity Versus Demand for Normal, Single, & Multiple Dry Years 3.11-28
Table 3.11-12: Water Demand Estimate (AFY) 3.11-28
Table 3.11-13: Salinas Buildout Conditions Water Generation Estimate 3.11-29
Table 3.11-14: Summary of Applicable City of Salinas Requirements 3.11-45
Table 3.11-15: Estimated Solid Waste Generation 3.11-53

Figures **Page Numbers**

Figure 2-1. Regional Map 2.0-23
Figure 2-2. Vicinity Map 2.0-25
Figure 2-3. Adjacent Land Uses 2.0-27
Figure 2-4. Existing Conditions 2.0-29
Figure 2-5. Aerial View 2.0-31
Figure 2-6. Specific Plan/Illustrative Plan 2.0-33
Figure 2-7. Vehicular Circulation Plan 2.0-35
Figure 3.1-1: Map of Air Basins and Districts 3.1-31
Figure 3.2-1: Bioregions Map 3.2-43
Figure 3.2-2: Wildlife Observations 3.2-45
Figure 3.2-3: Existing Plant Communities 3.2-47
Figure 3.2-4: Hydrology Map 3.2-49
Figure 3.2-5: CNDDB 1-mile Radius Search 3.2-51
Figure 3.2-6: CNDDB 9 Quad Search 3.2-53
Figure 3.5-1: Natural Gas Transmission Pipelines 3.5-27
Figure 3.6-1: Watersheds Map 3.6-31
Figure 3.6-2: Storm Drainage 3.6-33
Figure 3.6-3: FEMA Flood Map 3.6-35
Figure 3.6-4: Dam Inundation Areas 3.6-37
Figure 3.7-1: Project Location and Noise Measurement Locations 3.7-35
Figure 3.9-1: Public Facilities 3.9-25
Figure 3.9-2: Proposed Parks 3.9-27
Figure 3.10-1: Salinas Circulation Network 3.10-79
Figure 3.10-2: City of Salinas Truck Routes 3.10-81
Figure 3.10-3: Existing and Planned Bicycle Facilities 3.10-83
Figure 3.10-4: Existing Transit Service 3.10-85
Figure 3.10-5: Study Intersections 3.10-87
Figure 3.10-6: Project Trip Distribution 3.10-89
Figure 3.11-1: Project Trip Distribution 3.11-13
Figure 3.11-2: Water Distribution System Plan 3.11-31
Figure 3.11-3: Drainage System Plan 3.11-49
Figure 5.0-1: Reduced Land Area Alternative 5.0-33
Figure 5.0-2: Alternative Project Locations Considered but Rejected 5.0-35

Appendices

Appendix A: Notice of Preparation/Initial Study & Comments
Appendix B: Air Quality, Greenhouse Gases, and Energy Modeling
Appendix C: Biological Resources Report
Appendix D: Cultural Resources Information (Confidential)
Appendix E: Hazards and Hazardous Materials Studies/Reports
Appendix F: Hydrology and Water Quality Technical Study
Appendix G: Water Supply Assessment
Appendix H: Noise Technical Report
Appendix I: Transportation Impact Analysis

This section summarizes the purpose of the Environmental Impact Report (EIR) for the West Area Specific Plan (WASP) "project" or "proposed project." The following discussion addresses the environmental procedures that are to be followed according to State law, the intended uses of the EIR, the project's relationship to the City's General Plan, the EIR scope and organization, and a summary of the agency and public comments received during the public review period for the Notice of Preparation (NOP).

1.1 PURPOSE AND INTENDED USES OF THE EIR

The City of Salinas, as lead agency, determined that the proposed WASP is a "project" within the definition of CEQA. CEQA requires the preparation of an environmental impact report prior to approving any project, which may have a significant impact on the environment. For the purposes of CEQA, the term "project" refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378[a]).

An EIR must disclose the expected environmental impacts, including impacts that cannot be avoided, growth-inducing effects, impacts found not to be significant, and significant cumulative impacts, as well as identify mitigation measures and alternatives to the proposed project that could reduce or avoid its adverse environmental impacts. CEQA requires government agencies to consider and, where feasible, minimize environmental impacts of proposed development. CEQA further requires public agencies to balance a variety of public objectives, including economic, environmental, and social factors in making a decision to approve a development project with significant and unavoidable environmental impacts.

The City of Salinas, as the lead agency, has prepared this Draft EIR to provide the public and responsible and trustee agencies with an objective analysis of the potential environmental impacts resulting from construction and operation of the WASP Project. The environmental review process enables interested parties to evaluate the proposed project in terms of its environmental consequences, to examine and recommend methods to eliminate or reduce potential adverse impacts, and to consider a reasonable range of alternatives to the project. While CEQA requires that consideration be given to avoiding adverse environmental effects, the lead agency must balance adverse environmental effects against other public objectives, including the economic and social benefits of a project, in determining whether a project should be approved.

This EIR will be used by the City to determine whether to approve, modify, or deny the proposed project and associated approvals in light of the project's environmental effects. The EIR will be used as the primary environmental document to evaluate full project development, along with all associated infrastructure improvements, and permitting actions associated with the Project. All of the actions and components of the proposed project are described in detail in Section 2.0 of this Draft EIR.

1.2 TYPE OF EIR

The State CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR has been prepared as a Program EIR pursuant to CEQA Guidelines Section 15168. The program-level analysis considers the broad environmental effects of the proposed Project as a whole. The EIR examines the planning, construction and operation of the Project. The program-level approach is appropriate for the proposed Project because it allows comprehensive consideration of the reasonably anticipated scope of the development plan; however, not all aspects of the future development phases are known at this stage in the planning process. Subsequent development that requires further discretionary approvals will be examined in light of this EIR to determine whether additional environmental documentation must be prepared.

CEQA Guidelines Section 15168 states that a program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:

1) Geographically,
2) As logical parts in the chain of contemplated actions,
3) In connection with issuance of rules, regulations, plans or other general criteria to govern the conduct of a continuing program, or
4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

1.3 KNOWN RESPONSIBLE AND TRUSTEE AGENCIES

As required by CEQA, this EIR defines lead, responsible, and trustee agencies. The City of Salinas is the "Lead Agency" for the project because it holds principal responsibility for approving the project. The term "Responsible Agency" includes all public agencies other than the Lead Agency that have discretionary approval power over the project or an aspect of the project (CEQA Guidelines Section 15381). For the purpose of CEQA, a "Trustee" agency has jurisdiction by law over natural resources that are held in trust for the people of the State of California (CEQA Guidelines Section 15386).

The following agencies are considered Responsible or Trustee Agencies for this project, and may be required to issue permits or approve certain aspects of the proposed project:

- Monterey Bay Unified Air Pollution Control District: Demolition permit
- Central Coast Region - Regional Water Quality Control Board: National Pollution Discharge Elimination System (NPDES) general construction permit, Storm Water Pollution Prevention Plan (SWPPP) approval prior to construction activities
- Monterey Regional Water Pollution Control Agency
- Monterey County

- Monterey County Water Resources Agency
- Salinas Valley Solid Waste Authority

1.4 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for the EIR has involved, or will involve, the following general procedural steps:

NOTICE OF PREPARATION

The City circulated a Notice of Preparation (NOP) of an EIR for the proposed project on October 14, 2015 to trustee agencies, the State Clearinghouse, and the public. A public scoping meeting was held on October 29, 2015 at 6:30 p.m., at the McKinnon Elementary School in Salinas to present the project description to the public and interested agencies, and to receive comments from the public and interested agencies regarding the scope of the environmental analysis to be included in the Draft EIR. Concerns raised in response to the NOP were considered during preparation of the Draft EIR. The NOP and responses to the NOP by interested parties are presented in **Appendix A**.

DRAFT EIR

This document constitutes the Draft EIR. The Draft EIR contains a description of the project, description of the environmental setting, identification of project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. This Draft EIR identifies issues determined to have no impact or a less than significant impact, and provides detailed analysis of potentially significant and significant impacts. Comments received in response to the NOP were considered in preparing the analysis in this EIR. Upon completion of the Draft EIR, the City has filed the Notice of Completion (NOC) with the State Clearinghouse of the Governor's Office of Planning and Research to begin the public review period.

PUBLIC NOTICE/PUBLIC REVIEW

The City has provided a public notice of availability for the Draft EIR, and invites comment from the general public, agencies, organizations, and other interested parties. Consistent with CEQA, the review period for this Draft EIR is forty-five (45) days. Public comment on the Draft EIR or questions regarding the Draft EIR should be addressed to:

Gabriel Elliott, Project Manager
City of Salinas
Community Development Department
65 West Alisal Street Salinas, CA 93901
gabriel.elliott@ci.salinas.ca.us

RESPONSE TO COMMENTS/FINAL EIR

Following the public review period, a Final EIR will be prepared. The Final EIR will respond to written comments received during the public review period and to oral comments received at a public hearing during such review period.

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

The City will review and consider the Final EIR. If the City finds that the Final EIR is "adequate and complete", the City Council may certify the Final EIR in accordance with CEQA. The rule of adequacy generally holds that an EIR can be certified if:

1) The EIR shows a good faith effort at full disclosure of environmental information; and

2) The EIR provides sufficient analysis to allow decisions to be made regarding the proposed project in contemplation of environmental considerations.

The level of detail contained throughout this EIR is consistent with Section 15151 of the CEQA Guidelines and recent court decisions, which provide the standard of adequacy on which this document is based. The Guidelines state as follows:

> *An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of the environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.*

Following review and consideration of the Final EIR, the City may take action to approve, modify, or reject the project. A Mitigation Monitoring Program, as described below, would also be adopted in accordance with Public Resources Code Section 21081.6(a) and CEQA Guidelines Section 15097 for mitigation measures that have been incorporated into or imposed upon the project to reduce or avoid significant effects on the environment. This Mitigation Monitoring Program will be designed to ensure that these measures are carried out during project implementation, in a manner that is consistent with the EIR.

1.5 ORGANIZATION AND SCOPE

Sections 15122 through 15132 of the State CEQA Guidelines identify the content requirements for Draft and Final EIRs. An EIR must include a description of the environmental setting, an environmental impact analysis, mitigation measures, alternatives, significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. Discussion of the environmental issues addressed in the Draft EIR was established through review of environmental and planning documentation developed for the project, environmental and planning

documentation prepared for recent projects located within the City of Salinas, applicable local and regional planning documents, and responses to the Notice of Preparation (NOP).

This Draft EIR is organized in the following manner:

EXECUTIVE SUMMARY

This Executive Summary summarizes the characteristics of the proposed project, known areas of controversy and issues to be resolved, and provides a concise summary matrix of the project's environmental impacts and possible mitigation measures. This chapter identifies alternatives that reduce or avoid at least one significant environmental effect of the proposed project.

CHAPTER 1.0 – INTRODUCTION

Chapter 1.0 briefly describes the purpose of the environmental evaluation, identifies the lead, trustee, and responsible agencies, summarizes the process associated with preparation and certification of an EIR, and identifies the scope and organization of the Draft EIR.

CHAPTER 2.0 – PROJECT DESCRIPTION

Chapter 2.0 provides a detailed description of the proposed project, including the location, intended objectives, background information, the physical and technical characteristics, including the decisions subject to CEQA, related infrastructure improvements, and a list of related agency action requirements.

CHAPTER 3.0 - ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

Chapter 3.0 contains an analysis of environmental topic areas as identified below. Each subchapter addressing a topical area is organized as follows:

Environmental Setting. A description of the existing environment as it pertains to the topical area.

Regulatory Setting. A description of the regulatory environment that may be applicable to the project.

Impacts and Mitigation Measures. Identification of the thresholds of significance by which impacts are determined, a description of project-related impacts associated with the environmental topic, identification of appropriate mitigation measures, and a conclusion as to the significance of each impact after the incorporation of mitigation measures.

The following environmental topics are addressed in this section:

- Air Quality
- Biological Resources
- Cultural Resources
- Greenhouse Gases and Climate Change
- Hazards and Hazardous Materials

- Hydrology and Water Quality
- Noise
- Population and Housing
- Public Services
- Transportation and Circulation
- Utilities

CHAPTER 4.0 – CUMULATIVE IMPACTS

Chapter 4.0 evaluates and describes the following CEQA required topics: cumulative, and significant and unavoidable environmental effects under cumulative conditions.

CHAPTER 5.0 – OTHER CEQA-REQUIRED TOPICS

Chapter 5.0 evaluates and describes the following CEQA required topics: impacts considered less-than-significant, significant and irreversible impacts, growth-inducing effects, and significant and unavoidable environmental effects.

CHAPTER 6.0 - ALTERNATIVES TO THE PROJECT

State CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to the project, which could feasibly attain the basic objectives of the project and avoid and/or lessen any significant environmental effects of the project. Chapter 6.0 provides a comparative analysis between the environmental impacts of the project and the selected alternatives.

CHAPTER 7.0 - REPORT PREPARERS

This section lists all authors and agencies that assisted in the preparation of the EIR, by name, title, and company or agency affiliation.

APPENDICES

This section includes all notices and other procedural documents pertinent to the EIR, as well as technical material prepared to support the analysis. The EIR appendices are available in electronic format. The appendices can be viewed online at: http://www.cityofsalinas.org/our-city-services/community-development/documents-public-review.

CD copies of the appendices are also available at the City of Salinas Community Development Department 65 West Alisal Street Salinas, CA 93901.

1.6 SIGNIFICANCE CRITERIA

In general, CEQA Guidelines define a significant effect on the environment as “a substantial, or potentially substantial” adverse change in the physical environment. A potential impact is considered significant if a project would substantially degrade the environmental quality of land,

air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance (CEQA Guidelines §§15360, 15382).

Definitions of significance vary with the physical condition affected and the setting in which the change occurs. The CEQA Guidelines set forth physical impacts that trigger the requirement to make "mandatory findings of significance" (CEQA Guidelines §15065).

This CEQA document relies on three levels of impact significance:

1. Less-than-significant impact, for which no mitigation measures are warranted;

2. Significant impact that can be mitigated to a level that is less than significant; and,

3. Significant impact that cannot be mitigated to a level that is less than significant. Such impacts are significant and unavoidable.

Each resource area uses a distinct set of significance criteria. The significance criteria are identified at the beginning of the impacts discussion for each resource area. These significance criteria promote consistent evaluation of impacts for all alternatives considered, even though significance criteria are necessarily different for each resource considered. When criteria for significance determinations relative to a specific environmental resource are not identified in the CEQA Guidelines, specific criteria is developed for this Draft EIR consistent with the past pattern and practice of the City of Salinas.

1.7 CEQA GUIDELINES SECTION 15183 EXEMPTIONS

California Environmental Quality Act (CEQA) Guidelines Section 15183 allows a streamlined environmental review process for projects that are consistent with the densities established by existing zoning, community plan or general plan policies for which an Environmental Impact Report (EIR) was certified. As described in Section 2.0 (Project Description), the proposed project is consistent with the land uses and densities in the FGA's as established by the Salinas General Plan, for which an EIR was certified *[Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002) and *Final Supplemental for the Salinas General Plan Final Program EIR* (EDAW/AECOM 2007)]. The provisions contained in Section 15183 of the CEQA Guidelines are presented below.

15183. PROJECTS CONSISTENT WITH A COMMUNITY PLAN OR ZONING

(a) CEQA mandates that projects which are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. This streamlines the review of such projects and reduces the need to prepare repetitive environmental studies.

(b) In approving a project meeting the requirements of this section, a public agency shall limit its examination of environmental effects to those which the agency determines, in an initial study or other analysis:

(1) Are peculiar to the project or the parcel on which the project would be located,

(2) Were not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan, with which the project is consistent,

(3) Are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action, or

(4) Are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR.

(c) If an impact is not peculiar to the parcel or to the project, has been addressed as a significant effect in the prior EIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards, as contemplated by subdivision (e) below, then an additional EIR need not be prepared for the project solely on the basis of that impact.

(d) This section shall apply only to projects which meet the following conditions:

(1) The project is consistent with:

(A) A community plan adopted as part of a general plan,

(B) A zoning action which zoned or designated the parcel on which the project would be located to accommodate a particular density of development, or

(C) A general plan of a local agency, and

(2) An EIR was certified by the lead agency for the zoning action, the community plan, or the general plan.

(e) This section shall limit the analysis of only those significant environmental effects for which:

(1) Each public agency with authority to mitigate any of the significant effects on the environment identified in the planning or zoning action undertakes or requires others to undertake mitigation measures specified in the EIR which the lead agency found to be feasible, and

(2) The lead agency makes a finding at a public hearing as to whether the feasible mitigation measures will be undertaken.

(f) An effect of a project on the environment shall not be considered peculiar to the project or the parcel for the purposes of this section if uniformly applied development policies or standards have been previously adopted by the City or county with a finding that the development policies or standards will substantially mitigate that environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect. The finding shall be based on substantial evidence which need

not include an EIR. Such development policies or standards need not apply throughout the entire City or county, but can apply only within the zoning district in which the project is located, or within the area subject to the community plan on which the lead agency is relying. Moreover, such policies or standards need not be part of the general plan or any community plan, but can be found within another pertinent planning document such as a zoning ordinance. Where a City or county, in previously adopting uniformly applied development policies or standards for imposition on future projects, failed to make a finding as to whether such policies or standards would substantially mitigate the effects of future projects, the decision-making body of the City or county, prior to approving such a future project pursuant to this section, may hold a public hearing for the purpose of considering whether, as applied to the project, such standards or policies would substantially mitigate the effects of the project. Such a public hearing need only be held if the City or county decides to apply the standards or policies as permitted in this section.

(g) Examples of uniformly applied development policies or standards include, but are not limited to:

(1) Parking ordinances.

(2) Public access requirements.

(3) Grading ordinances.

(4) Hillside development ordinances.

(5) Flood plain ordinances.

(6) Habitat protection or conservation ordinances.

(7) View protection ordinances.

(8) Requirements for reducing greenhouse gas emissions, as set forth in adopted land use plans, policies, or regulations.

(h) An environmental effect shall not be considered peculiar to the project or parcel solely because no uniformly applied development policy or standard is applicable to it.

(i) Where the prior EIR relied upon by the lead agency was prepared for a general plan or community plan that meets the requirements of this section, any rezoning action consistent with the general plan or community plan shall be treated as a project subject to this section.

(1) "Community plan" is defined as a part of the general plan of a City or county which applies to a defined geographic portion of the total area included in the general plan, includes or references each of the mandatory elements specified in Section 65302 of the Government Code, and contains specific development policies and implementation measures which will apply those policies to each involved parcel.

(2) For purposes of this section, "consistent" means that the density of the proposed project is the same or less than the standard expressed for the involved parcel in the

general plan, community plan or zoning action for which an EIR has been certified, and that the project complies with the density-related standards contained in that plan or zoning. Where the zoning ordinance refers to the general plan or community plan for its density standard, the project shall be consistent with the applicable plan.

(j) This section does not affect any requirement to analyze potentially significant offsite or cumulative impacts if those impacts were not adequately discussed in the prior EIR. If a significant offsite or cumulative impact was adequately discussed in the prior EIR, then this section may be used as a basis for excluding further analysis of that offsite or cumulative impact.

1.8 TOPICS FOUND TO BE LESS THAN SIGNIFICANT IN INITIAL STUDY

Included below is a brief summary of findings from the Initial Study on environmental topics that were found to be less than significant and are not included within individual sections of the Draft EIR. For full Initial Study Findings and individual topics found to be less than significant through the Initial Study process refer to the Appendix.

AESTHETICS

The *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002) noted that General Plan buildout would allow development to occur in the City in both vacant and underdeveloped portions of the community, and that the introduction/expansion of urban uses into these areas has the potential to interrupt views of natural features, open space, the hillsides, and agricultural resources, reducing the aesthetic value of these resources. Additionally, new development in the City was found to increase the amount of light and glare in the community, particularly in areas planned for nonresidential development, such as retail and general commercial. It was also found that future development under the General Plan has the potential to change the visual character of the City.

To minimize and mitigate the impacts on aesthetics, the *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002) presented the following five mitigation measures: Mitigation Measure A1 requires the City to implement the City's Gateway Guidelines; Mitigation Measure A2 requires the City to strengthen and require compliance with the City's Design Guidelines; Mitigation Measure A3 requires the City to improve the Lighting Ordinance; Mitigation Measure A4 requires the City to implement landscaping requirements for all proposed projects; and Mitigation Measure A5 requires the City to review all discretionary projects for aesthetics impacts. The *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002) concluded that with the implementation of Mitigation Measures A1 through A5, the potential citywide aesthetics impact would be reduced to a **less than significant** level.

Subsequently, the *Final Supplemental for the Salinas General Plan Final Program EIR* (EDAW/AECOM 2007) indicated that aesthetic impacts associated with the FGAs, which includes the WASP, would not be different from those discussed in the *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002). Any future development under the approved General Plan, which includes all development under the proposed project, would be

required to comply with the above referenced regulations, policies, and standards. Implementation of the proposed project would not result in any new significant adverse impacts beyond those addressed in the in the *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002) and *Final Supplemental for the Salinas General Plan Final Program EIR* (EDAW/AECOM 2007). This topic does not warrant additional analysis and will not be addressed further in the EIR.

AGRICULTURE AND FOREST RESOURCES

The *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002) noted that General Plan buildout would result in the conversion of 3,525 acres designated for agriculture to urban uses. The *Final Environmental Impact Report,* also indicates that General Plan buildout would result in agricultural activity in proximity to residential and other urban uses, which may result in conflicts between the uses. It is noted that agricultural activity can cause nuisances related to air quality and noise that may disturb surrounding development. Urban activities may also negatively affect nearby agricultural uses, as increased vandalism often occurs and the introduction of domestic animals may disturb certain agricultural activities.

The *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002) concluded that with the implementation of Mitigation Measures AG1 through AG4, the impacts on potential compatibility issues would be reduced to a **less than significant** level; however, while the impacts on agricultural conversion would be reduced to the extent feasible, a **significant and unavoidable** impact would remain related to the loss of important farmland. Mitigation AG5 specifically addressed Agricultural Land Conservation Easement Program, which states that the City will work with the County of Monterey, and other local jurisdictions, to create and implement an agricultural land conservation easement program including such measures as securing the dedication of easements or by paying a mitigation fee that could be used to purchase easements through a mitigation bank. Additionally, in 2006, the City Council adopted Resolution No. 19422, approving the Agricultural Land Preservation Program. The resolution adopted a $750.00 per acre mitigation fee for agricultural lands currently designated by the California Department of Conservation's Farmland Mapping Program as "Prime" or "of Statewide Importance."

The City of Salinas certified the *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002), adopted a statement of overriding considerations relative to this significant and unavoidable impact, and approved the Salinas General Plan.

Subsequently, the *Final Supplemental for the Salinas General Plan Final Program EIR* (EDAW/AECOM 2007) indicated that agricultural impacts associated with the FGAs, which includes the WASP, would not be different from those discussed in the *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002).

Any future development under the approved General Plan, which includes all development under the proposed project, would be required to comply with the above-referenced regulations, policies, and standards. Implementation of the proposed project would not result in any new significant adverse impacts beyond those addressed in the *Final Environmental Impact Report,*

Salinas General Plan (Cotton Bridges Associates 2002) and *Final Supplemental for the Salinas General Plan Final Program EIR* (EDAW/AECOM 2007). This topic does not warrant additional analysis and will not be addressed further in the EIR.

GEOLOGY AND SOILS

Implementation of the proposed project would not result in any new significant adverse impacts beyond those addressed in the Final Environmental Impact Report, Salinas General Plan (Cotton Bridges Associates 2002) and Final Supplemental for the Salinas General Plan Final Program EIR (EDAW/AECOM 2007). This topic does not warrant additional analysis and will not be addressed further in the EIR.

LAND USE AND PLANNING

The *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002) concluded that with the impacts would be reduced to a **less than significant** level with mitigation.

Subsequently, the *Final Supplemental for the Salinas General Plan Final Program EIR* (EDAW/AECOM 2007) indicated that impacts associated with the FGAs, which include the Specific Plan Area, would not be different from those discussed in the *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002).

The City certified this EIR and approved annexation of the North of Boronda FGA, which includes the WASP. The project as proposed is consistent with the GSA-MOU. All development under the proposed project would be required to comply with the regulations, policies, and standards identifies in the the *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002), and *Final Supplemental for the Salinas General Plan Final Program EIR* (EDAW/AECOM 2007). Implementation of the proposed project would not result in any new significant adverse impacts beyond those addressed within these supporting documents. This topic does not warrant additional analysis and will not be addressed further in the EIR.

MINERAL RESOURCES

It was determined in the *Final Supplemental for the Salinas General Plan Final Program EIR* (EDAW/AECOM 2007) that development of the Future Growth Area, including the Specific Plan Area, would not have a significant impact on mineral resources or mining activities. As such, implementation of the proposed project would have no impact on mineral resources and this topic does not warrant additional analysis and will not be addressed further in the EIR.

RECREATION

While the proposed project would increase the demand for parks or other recreational facilities based on the population growth, the amount of parkland and open space provided within the Specific Plan Area sufficiently meets the City's parkland requirements. Construction of the parkland would not result in any new significant adverse impacts beyond those addressed in the in the Final Environmental Impact Report, Salinas General Plan (Cotton Bridges Associates 2002) and

Final Supplemental for the Salinas General Plan Final Program EIR (EDAW/AECOM 2007). This topic does not warrant additional analysis and will not be addressed further in the EIR.

1.9 COMMENTS RECEIVED ON THE NOTICE OF PREPARATION

The City received seven written comment letters on the NOP for the proposed Project Draft EIR. A copy of each letter is provided in **Appendix A** of this Draft EIR. A public scoping meeting was held on October 29, 2015 to present the project description to the public and interested agencies, and to receive comments from the public and interested agencies regarding the scope of the environmental analysis to be included in the Draft EIR.

1. Northern Salinas Valley Mosquito Abetment District (October 21, 2015)
2. Monterey-Salinas Transit (November 16, 2015)
3. California Natural Resource Agency Division of Land Resource Protection (November 10, 2015)
4. Salinas Union High School District (November 10, 2015)
5. Transportation Agency of Monterey County (March 31, 2016)
6. Ohlone/Costanoan-Esselen Nation (January 11, 2016)
7. Santa Rita Union School District (January 29, 2016)

1.10 AREAS OF CONTROVERSY

The following are topics of public concern or potential controversy that have become known to the City staff based on public input, known regional issues, and staff observations:

- Conversion of undeveloped land to urban use
- Traffic congestion
- Noise associated with project operations and traffic
- Project impact on public services and facilities, including schools
- Project contribution to global climate change/greenhouse gas emissions

This page left intentionally blank.

2.1 PROJECT LOCATION AND SETTING

REGIONAL LOCATION AND SETTING

The City of Salinas is located in northern Monterey County, within the Salinas Valley between the Gabilan and Santa Lucia mountain ranges. Salinas is situated approximately 20 miles northeast of the city of Monterey, 60 miles south of San Jose, 100 miles south of San Francisco and 325 miles north of Los Angeles. Figure 2-1 displays the proposed Project's Regional Location. Several regional transportation routes are located within or near Salinas, including U.S. Highway 101 (U.S. 101), State Routes 68 (SR 68) and 183 (SR 183), the Union Pacific Railroad line and the Monterey Regional Airport in Monterey. Salinas Municipal Airport, a general aviation facility, is located in the southeastern portion of the city.

The Specific Plan Area is located within the Salinas incorporated city limits. It is bounded by San Juan Grade Road on the west, East Boronda Road (herein referred to as "Boronda Road") on the south, Natividad Road on the east, and Rogge Road and the future extension of Russell Road on the north. Gabilan Creek is located east of the Specific Plan Area, while U.S. 101 and North Main Street are located to the west. Figure 2-2 displays the Project's vicinity. Unincorporated land under the jurisdiction of the County of Monterey abuts the Specific Plan Area on the north and northeast. The City and County General Plan land use designations for the surrounding areas are illustrated in Figure 2-3.

Assessor Parcel Numbers (APNs) and Property Ownership

The Specific Plan Area includes 13 parcels and multiple property owners. Table 2-1 below list the properties and acreages, and Figure 2-4 displays properties within the Specific Plan Area.

TABLE 2-1: WEST AREA SPECIFIC PLAN PROPERTY OWNERSHIP

APN	*PROPERTY IDENTIFICATION*	*PARTICIPATING OWNER/REPRESENTATIVE*	*APPROXIMATE LAND AREA (ACRES)*
21123160 21123161	Cloverfield	Mark Kelton	138.36
21101101	Piffero	None	0.78
2112316	Harden	Ray Harrod	72.56
21101102	Sbrana	None	117.95
21123112 21123113	Bondesen	Patricia Bondesen	99.55
21101103	Kantro	None	154.04
21101109	Madalora	Joseph Rivani	108.32
21123159	Santa Rita	None	11.46
21101111	Salinas Union	None	38.97

APN	PROPERTY IDENTIFICATION	PARTICIPATING OWNER/REPRESENTATIVE	APPROXIMATE LAND AREA (ACRES)
21101108	Mortensen	Al Mortensen, Gary Mortensen	52.85
21101110	Glover	None	1.71
Total			**796.55**

SPECIFIC PLAN AREA PHYSICAL CHARACTERISTICS

The topography of the Specific Plan Area is nearly flat, with little change in elevation. The overall slope from northeast to southwest is approximately 0.3%, and there are no natural streams or water bodies present. However, a portion of the northwestern corner of the Specific Plan Area, at the junction of San Juan Grade Road and Russell Road, has been designated a 100-year floodplain area by the Federal Emergency Management Agency (FEMA). This area is currently located in FEMA Flood Zone A. The remainder of the site is located in FEMA Flood Zone C (See FIRM Map #06053C0207G dated April 2, 2009, for the boundaries of the flood zones).

Although this area is currently being farmed, it contains limited development. Most agricultural activity on-site and in the immediate vicinity has consisted of cultivation of various types of row crops. Figure 2-5 provides and aerial view of the Specific Plan Area. The site has been heavily disturbed for years from agricultural practices. None of the parcels have Williamson Act contracts or other encumbrances protecting agricultural activities. According to maps produced by the State of California Farmland Mapping and Monitoring Program (FMMP), the site is considered prime farmland, or farmland of statewide importance. The loss of farmland has been addressed as part of the Environmental Impact Report for the Salinas General Plan and findings of overriding considerations were adopted by the City Council. The Specific Plan Area is not within an adopted Habitat Conservation Plan or other Natural Community Conservation Plan.

Urban development consists of McKinnon Elementary School which is part of the Santa Rita Union School District. The school provides education to students in the north Salinas area from kindergarten to 5th grade. McKinnon Elementary is located in the southern portion of the Specific Plan Area, near the intersection of East Boronda Road and McKinnon Street. A few residences and farm structures are clustered within the eastern portion of the area, adjacent to Natividad Road. Other residences with accessory farm structures are located in the northern portion, adjacent to Rogge Road, and in the western portion near the intersection of San Juan Grade Road and Boronda Road.

In addition, there is evidence of structures or development that formerly existed. Close to Natividad Road is an area of bare ground that could have served as a location for activities associated with agricultural operations. Along San Juan Grade Road in the western portion is an area of bare ground with some trees along its northern edge. This was likely at one time the location of a residence that no longer exists.

Existing infrastructure is currently located along Boronda Road including water, sewer, electricity (12kV underground primary line), storm drainage and dry utilities. PG&E also operates a 60-kV

overhead power line transmission (easement) which runs generally in a north/south direction through the site. Monterey-Salinas Transit (MST) currently provides transit access to the site from existing bus stops located along Boronda Road.

Ambient noise levels are currently low except immediately adjacent to the surrounding arterial roadways and from noise associated with farming operations.

There is dust generated by farming activities such as tilling, and emissions associated with farming activities such as tractors and other motorized farming equipment at the site. The area is located in a non-attainment zone for the North Central Coast Air Basin.

SURROUNDING LAND USES

North: The Bolsa Knolls residential area is located to the north of the Specific Plan Area, on the northeastern corner of the intersection of Russell Road and San Juan Grade Road. Scattered residences and other non-residential uses are also located along Rogge Road to the north. Further to the north is a mix of agricultural land, rural residences, and the Club at Crazy Horse Ranch formerly known as the Salinas Golf and Country Club. These land uses are all located in the unincorporated area of Monterey County.

East: Land to the east of the Specific Plan Area is currently used primarily for agricultural production and is zoned New Urbanism Interim (NI) with a Specific Plan Overlay District. This area is located in the North of Boronda Future Growth Area (FGA) and a specific plan (referred to as the Central Area Specific Plan [CASP]) has been submitted to the City and is currently being processed for this area. The CASP proposes a mix of urban land uses, similar to those proposed for the WASP.

South: Across Boronda Road directly to the south, is the Harden Ranch Specific Plan. The portion of the Harden Ranch Specific Plan which abuts the West Area is primarily residential. Most of the residences are of the type associated with low density residential uses, mainly single-family detached homes. However, some medium density and high density (apartment) units are located in this area as well. These residential uses are zoned R-L-5.5 (Residential Low Density), R-M-2.9 (Residential Medium Density) and R-H-1.8 (Residential High Density). Single-family detached homes (zoned R-L 5.5) are also located to the southeast of the Specific Plan (east of Natividad Road). Other land uses in the Harden Ranch Specific Plan Area include a commercial shopping center (Shaker Square) located at the southwest corner of Natividad Road and Boronda Road which is zoned Retail Commercial (RC) and the New Republic Elementary School (Santa Rita Union School District) which is zoned Public/Semipublic (PS). Extensive commercial development is located generally west and southwest of the Specific Plan Area, along both North Main Street and U.S. 101. This is the location of some of the major retail centers in Salinas, including the Northridge Shopping Center, Santa Rita Shopping Center and Harden Ranch Plaza. These areas are zoned Commercial Retail (RC).

West: The area directly to the west is residential consisting of low, medium and high density residential uses. These uses are zoned R-L-5.5 (Residential Low Density), R-M-2.9 (Residential Medium Density) and R-H-2.1 (Residential High Density). Also located farther to the west is Santa Rita Elementary School (Santa Rita Union School District) which is zoned Public/Semipublic (PS).

The City and County General Plan land use designations for the above areas are illustrated on Figure 2-3.

GENERAL PLAN LAND USES

In accordance with the General Plan, the Specific Plans for the FGA will specify the ultimate distribution, location and intensity of land uses in the FGA in accordance with the total development capacities provided under the General Plan for these areas. The Land Use Designations shown for land located within the FGA boundaries on the General Plan Land Use and Circulation Policy Map are provided for generally illustrative purposes, provide no land use entitlements, and are subject to adjustment and refinement as part of the Specific Plan approval process.

The General Plan Land Use Designations for the proposed WASP includes Mixed Use, Residential Low Density, Residential Medium Density, Residential High Density, Public/Semipublic, Open Space and Park. These designations are consistent with the existing General Plan Land Use Designations for the site. Upon approval of the Specific Plan, the location distribution and intensity of these General Plan Land Use Designations shall be in accordance with the Specific Plan's proposed land use plan. These Designations and the proposed Zoning Districts are described below and shown on the illustrative site plan (Figure 2-6).

2.2 PROJECT GOALS AND OBJECTIVES

The principal objective of the proposed project is the approval and subsequent implementation of the proposed West Area Specific Plan and related entitlements. Proposed land uses in the 797-acre Specific Plan Area include residential, mixed use commercial, community park, neighborhood parks, small parks and open space (including supplemental storm water detention/retention basins). Implementation will involve development of the site under the New Urbanism Zoning districts of Neighborhood Edge (NE)/Low Density Residential, Neighborhood General 1 (NG-1)/Low/medium Density Residential, Neighborhood General 2 (NG-2)/High Density Residential, Village Center (VC) as well as the Public and Semipublic (PS), Parks (P), and Open Space (OS) zoning districts. A Specific Plan Overlay district will also apply to each zoning districts. These Zoning Districts are further described below.

The Specific Plan includes goals, which are a description of some desired future condition, as a basis for objectives, policies, implementation measures, and other tools used for achieving the goals. The goals for the Specific Plan are based on the Salinas General Plan, especially as it applies to the FGA and the principles of New Urbanism developed by the City. The design principles of Crime Prevention through Environmental Design (CPTED), Health in all Policies, Smart Growth and Green building/streets are also included to promote the creation of a vibrant, healthy, walkable, safe and sustainable community. The City's National Pollutant Discharge Elimination System (NPDES) Permit, Storm Water Development Standards (SWDA) and Storm Water Standard Plans (SWSP) are also addressed in the design. The specific goals are to:

- Create a community with a compact form that promotes sustainable neighborhood design and is pedestrian, bicycle, and transit friendly.

- Provide a variety of land uses in easy walking distance of housing including a mixed-use village, parks, and schools to reduce vehicle miles travelled.
- Provide parks and other public green space in accordance with General Plan standards that are designed to be safe and easily accessible to residents.
- Provide public services and infrastructure improvements that achieve and maintain City service standards.
- Provide an inviting tree-lined street system which incorporates traffic calming and other measures.
- Establish an interconnected sidewalk/pathway and open space system throughout the development which links to the greater North of Boronda FGA and the City as a whole.
- Create a sense of place and unique identity through the use of entry treatments, landscaping, streetscapes, public art, decorative street lighting, pedestrian amenities and other elements.

2.3 PROJECT DESCRIPTION

INTRODUCTION

The proposed West Area Specific Plan (hereinafter referred to as Specific Plan, West Area or WASP) will establish the land use planning and regulatory guidance including the land use and zoning designations and policies, development regulations and design standards for the approximately 797-acre Specific Plan Area. The Specific Plan will serve as a bridge between the Salinas General Plan and individual development applications in the Specific Plan Area, applying—and adding greater specificity to—the goals, policies and concepts of the General Plan for that area. The Specific Plan provides a complete blueprint for development of the Specific Plan Area, including:

- A description of proposed land uses,
- Policies, regulations and standards to support the Specific Plan,
- Infrastructure needed to support the Specific Plan, and
- Implementation and administrative processes needed for plan development.

The Specific Plan has been crafted to be consistent with overall community goals as expressed in the General Plan, as well as more specific policies and implementation measures contained in other documents. The City of Salinas Zoning Code requirements will apply to development applications and property within the Specific Plan Area unless specifically superseded by the development regulations or design standards contained in the Specific Plan.

The Specific Plan will establish the overall land use concept and development framework for the West Area. The specific planning process involves the following analyses: planning, environmental, financial, and engineering. The process also includes public comment and contribution; developing a document that will guide the future development of the Specific Plan Area; and subsequent implementation measures recommended by the Specific Plan. The contents of the Specific Plan reflect the physical characteristics of the Specific Plan Area, as well as the City's goals

for land use change in general and for the Specific Plan Area in particular. The Specific Plan establishes and/or identifies:

- The context for the Specific Plan by describing New Urbanism and other design principles, purpose, relationship to and conformance with the General Plan policies, the preparation process, and the content of the Plan.
- The proposed land use plan, General Plan Land Use and Zoning Designations, development intensities, and organization of land uses used to meet the objectives of the Specific Plan.
- The use classifications and development regulations to implement the land uses contained in the Specific Plan which will create a New Urbanism style community.
- The standards that guide design and planning of residential and mixed-use commercial development, as well as parks and other amenities.
- The location and classification of roadways and the circulation infrastructure needed to link the Specific Plan Area to the vicinity road network.
- Public services and provides a framework for expansion of infrastructure systems.
- The plans for low impact development features and supplemental storm water collection system that are being incorporated into the project to comply with the City's National Pollutant Discharge Elimination System (NPDES) Permit, Storm Water Development Standards (SWDS) and Storm Water Standard Plans (SWSP).
- The proposed financing plan, project phasing, public facility cost summaries, and funding sources.
- The project review process, actions, and approvals needed to implement and amend the Specific Plan.

BACKGROUND

SPHERE OF INFLUENCE AMENDMENT, PRE-ZONING AND ANNEXATION

In 1986, the City entered into the Boronda Memorandum of Understanding (MOU) with the County of Monterey. The intent of the MOU was to preserve the best agricultural land located to the south and west of Salinas, and to provide certain areas for future urban growth. This future growth was to be predominantly in a northeasterly direction, between San Juan Grade Road to the northwest and Williams Road to the southeast.

In 2006, the Boronda MOU was replaced by the Greater Salinas Area MOU adopted jointly by the City Council and County Board of Supervisors. The intent of the MOU was to preserve agricultural lands within Monterey County, provide future growth areas for Salinas and provide adequate financing for services and facilities for the City and the County's Greater Salinas Area Plan area. Subsequent to the adoption of the MOU, the City of Salinas began the process of amending its Sphere of Influence to include the Future Growth Areas (FGAs) which are located generally to the north and east of the City. The portion of the FGA which is located generally north of Boronda Road, west of Williams Road, east of San Juan Grade Road and south of Rogge Road and the future extension of Russell Road is referred to as the North of Boronda FGA. In December 2007, applications for an amendment to the City's Sphere of Influence (to include the FGAs) and Pre-

Zoning and Annexation (for the majority of the North of Boronda FGA consisting of approximately 2,400 acres) were submitted to the Monterey County Local Agency Formation Commission (LAFCO) for consideration. A Supplemental EIR for the Salinas General Plan Final Program EIR (SCH#2007031055) was also submitted in conjunction with the subject applications. The applications were approved by LAFCO on May 19, 2008.

The North of Boronda FGA (which includes the West Area Specific Plan) was formally annexed to the incorporated City of Salinas on September 8, 2008 and zoned New Urbanism Interim (NI) with a Specific Plan Overlay District.

SPECIFIC PLAN INITIATION

Policy LU-4 of the Salinas General Plan requires the preparation of Specific Plans prior to development of any portion of the FGAs (which includes the North of Boronda FGA and the proposed West Area Specific Plan). The adoption of the West Area Specific Plan by the City is authorized by the California Government Code, Title 7, Division 1, Chapter 3, Article VIII, Section 65450 through 65457. The Specific Plan is also subject to the requirements of Article VI, Division 15: Specific Plans of the Salinas Zoning Code.

For planning purposes, the North of Boronda FGA has been generally divided by the City into three separate proposed Specific Plan Areas – the West Area (WASP), the Central Area (CASP) and East Area (EASP). A fourth Specific Plan (consisting of approximately 20 acres) known as the Gateway Center Specific Plan (GCSP) was carved out of the proposed WASP to facilitate the development of a large commercial center. The GCSP was approved by the City in 2011 and further details are provided under the heading of The Gateway Center Specific Plan, below.

These Specific Plan Areas are illustrated in Figure 2-3. To date, applications for Specific Plans have been submitted to the City for the WASP and CASP; no entitlement application has been submitted for the EASP. Infrastructure development and Circulation improvements have been coordinated among the three Specific Plan Areas through the overall planning process.

PLANNING PROCESS

A majority of the WASP property owners and developers have been involved with and worked in a collaborative fashion since approximately 2004 to plan the proposed Specific Plan. The General Plan identifies the level of development that would be allowable within the FGA (including the North of Boronda FGA and the West Area Specific Plan). Given this fact, the General Plan land uses, densities, goals and policies, the number of total housing units and mixed use/commercial floor areas and other factors were the starting point for the specific plan planning process.

The General Plan requires that new development in the FGA be based on New Urbanism as well as other design principles to promote walkability and the use of alternative modes of transportation, provide a variety of housing choices, ensure access to parks and open space, promote sustainability, etc. To ensure preservation of agricultural land and to achieve the other benefits of compact urban design, the General Plan mandates that new residential development have a minimum average density of 9 dwelling units per net residential acre and that this density not be achieved through an exclusive mix of low and high-density units. As a method of ensuring a variety

of housing choices, the General Plan further requires that 15% of the housing units fall within the density range of 16-24 units per net residential acre and 35% to 45% of the housing units fall within the density range of 7-14 units per net residential acre. These factors were also addressed in the planning of the Specific Plan.

The actual distribution of land uses within the Specific Plan is dependent on opportunities and constraints on the site and the relationship between the Specific Plan and surrounding developed and developing areas. Based on the above-stated factors, conceptual land use diagrams were prepared with the intent of implementing the General Plan within the WASP. More detailed maps and project description materials were then prepared to incorporate the City's direction and City staff review of the conceptual diagrams. The overall level of development in the Specific Plan has been planned to match the level and type of development for the area anticipated in the General Plan. It is intended that upon approval of the Specific Plan, the document will clearly direct all aspects of the physical development of the Specific Plan Area.

THE GATEWAY CENTER SPECIFIC PLAN

In 2011, the City of Salinas approved "The Gateway Center Specific Plan". This 20.23-acre specific plan is located at the northeast corner of Boronda Road and San Juan Grade Road. This area was originally envisioned to be part of the West Area Specific Plan but was subsequently removed and approved as a separate Specific Plan Area. This area is not included as part of the proposed West Area Specific Plan and is shown as "Not a Part" on the figures and maps. However, the two specific plans have been coordinated with respect to buffers, pathway connections, supplemental detention/retention basin design, and other plan features.

LAND USE COMPONENTS

The above-noted goals, design principles and requirements are reflected in the following key features of the Specific Plan:

- Four neighborhoods, each organized around a neighborhood park to provide a public gathering space for residents, and pathways that connect from residential areas to these parks.
- Each neighborhood contains a mix of residential densities meeting General Plan requirements (for medium and high densities) and housing types.
- Location of parks such that all residents will be within an approximately five-minute walking time of a neighborhood or small park and ten minutes from the community park.
- A central core of public facilities and services that serve all four neighborhoods and residents of the surrounding area. The central core comprises the Village Center with retail and professional services, an approximately 30-acre community park, a middle school, a high school, and medium and high density residential uses.
- A network of pathways and pedestrian-friendly streets that connect all of the public facilities in the Specific Plan Area including the Village centers, parks and schools. An east/west off-street pedestrian and bicycle shared-use pathway will be provided along the entire length of the Specific Plan to link the WASP to the remainder of the North of

Boronda FGA (including the proposed CASP) and to other areas of the City. Bike lanes, sidewalks and pathway connections will also be provided within the Specific Plan and to off-site areas.

- A Village Center that is easily accessible to the surrounding residential neighborhoods by local streets and pedestrian pathways as well as to vehicular traffic on Boronda Road.
- The Village Center which includes housing and a central green space/plaza that will be one of the primary focus points in the area.
- Providing traffic calming methods at key intersections and other locations near parks, schools and other areas to calm traffic and enhance pedestrian and bicycle safety.
- Incorporation of decorative street lighting consisting of Light-Emitting Diode (LED) lighting fixtures and pedestrian amenities throughout the Specific Plan to promote a sense of place.
- Incorporation of Low Impact Development (LID) features throughout the development to reduce and eliminate the need for large, unattractive, industrial-looking detention/retention basins. Instead, supplemental storm water facilities where provided or needed will include varied slopes through grading and the use of plants and trees and other elements to create a more natural appearance.
- Inclusion of numerous Leadership in Energy and Environmental Design (LEED) measures and design principles.

The quantifiable objectives of the proposed project include the development of up to 4,340 residential dwelling units (with a minimum of 3,553 required under the General Plan), up to 571,500 square feet of commercial/mixed use building area, and up to 177 acres of public facilities (including three elementary schools, a high school, middle school, supplemental detention/retention basins and 11 parks). It is anticipated that the Specific Plan Area will have up to 15,928 residents at project build-out.

Tables 2-2 and 2-3 (below) summarize the net acreages of each land use, the maximum and minimum number of units, average residential density by neighborhood/district and the maximum mixed use/commercial square footage.

The Specific Plan proposes housing in a variety of densities that correspond with residential land use designations included in the General Plan as shown below. Residential development will include single-family dwellings in relatively low densities of 6 to 8 (minimum 6 du) dwelling units per net residential acre (Neighborhood Edge), medium density housing in the range of 9 to 15 units (minimum 9) per net residential acre (Neighborhood General-1), and relatively high density multifamily development in the range of 16 to 24 (minimum 16) units per net residential acre (Neighborhood General-2). The Village Center (VC) will include residential units, offices, retail, and professional services. As used in the Specific Plan "Net residential acres are the private lands zoned for residential uses exclusive of streets, parks, and all other uses." In addition, to encourage affordable housing choices, it is proposed that any portion of the planning area which is designated as NG-2 may be built at a density of 30 dwelling units per net residential acre as long as the total number of units allowed in the Planning area is not exceeded and the required percentage of medium and high-density units meet General Plan requirements.

As previously indicated, the Specific Plan Area is currently zoned New Urbanism Interim (NI) with a Specific Plan Overlay district. In conjunction with the approval of the Specific Plan, the site would be rezoned to the following districts: The corresponding General Plan Land Use Designations are also indicated.

Proposed Zoning Districts*	**Existing General Plan Land Use Designations**
Neighborhood Edge (NE)	Residential Low Density
Neighborhood General 1 (NG-1)	Residential Medium Density
Neighborhood General 2 (NG-2)	Residential High Density
Village Center (VC)	Mixed Use
Open Space (OS)	Open Space
Park (P)	Park
Public/Semipublic (PS)	Public/Semipublic

***A Specific Plan Overlay District applies to each Zoning district.

The proposed residential land uses and zoning districts are further described below:

Neighborhood Edge (NE)

The NE residential areas provide for the development of single-family detached and attached homes. The designation allows a minimum of 6.0 dwelling units per net residential acre and a maximum density of 8.0 dwelling units per net residential acre or 10 dwelling units per net residential acre with an affordable housing density bonus of 25%.

Neighborhood General 1 (NG-1)

The NG-1 district provides for the development of small-lot single-family detached homes, single-family attached (townhomes, rowhouses, triplexes), and duplexes. Allowable multifamily uses include condominiums, as well as apartment units. The designation allows a maximum of 14.0 dwelling units per net residential acre or 17.5 dwelling units per net residential acre with a density bonus of 25%.

Neighborhood General 2 (NG-2)

The NG-2 district provides for the development of single-family attached (rowhouses, triplexes), and multifamily (condominiums, and apartments) units. The designation allows a maximum of 24.0 dwelling units per net residential acre or up to 30.0 dwelling units per net acre, as long as the maximum unit count for the Planning Area is not exceeded.

DESCRIPTION OF NEIGHBORHOODS

The Specific Plan proposes four residential neighborhoods, each with an identifiable public gathering place, a mix of land uses, and a mix of residential densities (Figure 2-6). The neighborhoods are each centered around a distinct neighborhood center or public gathering place. The neighborhood centers are located in easily accessible locations for both local pedestrians and the automobile circulation system. The neighborhood centers, and the Specific Plan as a whole, would be designed to provide convenient and easy access for pedestrians and bicyclists, while accommodating vehicular trips.

As of the writing of this document, the neighborhoods and neighborhood subareas did not have names; therefore, they are referenced by number below.

Neighborhood 1

Neighborhood 1 is proposed in the southwestern portion of the Specific Plan Area (Figure 2-6). It is the location of the current McKinnon Elementary School, which is not proposed to be altered as a part of the Specific Plan. McKinnon Elementary School currently serves residential areas south of Boronda Road and west of San Juan Grade Road. McKinnon Elementary School, as well as the neighborhood park, would provide a central public gathering space for Neighborhood 1. The Specific Plan also proposes one small park within Neighborhood 1. This neighborhood has an estimate of 961 housing units.

Adjacent to the southwest corner of Neighborhood 1 is the GCSP. This area was subject to a separate planning process and the specific plan for that property was approved by the City of Salinas in 2011; therefore, it is not a part of the WASP. However, the plans for the GCSP and the WASP are integrated in two important ways: (1) a pathway connects the two areas, allowing WASP residents to access the retail services in the GCSP by walking and bicycling; (2) a supplemental detention/water quality and retention basin, designed as part of the GCSP, is planned to be expanded to provide additional capacity to support the WASP development to supplement the site/parcel based LID requirements per the City Storm Water Development Standards (SWDS). Additionally, an 80-foot wide noise attenuation setback including a 10-foot landscaped area and walkway connection to San Juan Grade Road will be provided along the southern boundary of the GCSP.

Neighborhood 2

Neighborhood 2 is proposed in the northwestern portion of the Specific Plan Area (Figure 2-6). The neighborhood is focused on a linear park oriented roughly east to west. The linear park extends through the neighborhood and connects the community park in the center of the Specific Plan Area with the neighborhood park proposed in the northwestern portion of the neighborhood. This neighborhood has an estimate of 1,328 housing units. Most of the neighborhood's medium and higher density residential areas are near the proposed linear park/community park areas.

Neighborhood 3

Neighborhood 3 will encompass the southeastern portion of the Specific Plan Area (Figure 2-6). The neighborhood includes an elementary school, a neighborhood park, and one small park, which together are the focal points of the neighborhood. This neighborhood has an estimate of 1,504 housing units.

Neighborhood 4

Neighborhood 4 will encompass the northeastern portion of the Specific Plan Area (Figure 2-6). The neighborhood includes a neighborhood park that is connected to the surrounding residential units and the other neighborhoods by pathways and safe crossings at key intersections. The high school is located west of Neighborhood 4. This neighborhood has an estimate of 540 housing units.

The Village Center

The proposed Village Center is the mixed use commercial and activity focus of the entire Specific Plan Area. The mix of neighborhood-serving commercial and entertainment opportunities are intended to help the Specific Plan Area to function as a mostly self-reliant community, with many necessary goods and services being available within walking or bicycling distance of residences. The mix of uses in the Village Center may include a grocery store, and a complement of shops, restaurants, residential units, offices, retail, and professional services. On the north side of the Village Center is the town square or public plaza. The Village Center may have a development intensity of up to 1.0 floor-area ratio (FAR) plus 10 dwelling units per net acre. Conversion of commercial FAR to residential units is also permitted in accordance the General Plan and Zoning Code to increase the number of residential units. In addition to the 571,500 square feet of mixed use commercial floor area, a minimum of 91 dwelling units will also be provided. Housing over commercial is encouraged, but not required, within the Village Center, and the Village Center as currently proposed, would be surrounded by higher density housing types, such as multifamily (apartments, condominiums), single-family attached (townhomes, rowhouses) and live/work units.

Table 2-2 depicts the proposed residential development program for the WASP. Table 2-3 depicts the proposed non-residential development program for the WASP.

TABLE 2-2: WEST AREA SPECIFIC PLAN RESIDENTIAL DEVELOPMENT PROGRAM

	PLANNING AREA NET ACRES	AVERAGE RESIDENTIAL DENSITY (UNITS/ACRE)	PROJECTED RESIDENTIAL UNITS				**TOTAL**
			NE	VC	NG-1	NG-2	
Neighborhood 1	101.77	9.4	211	31	563	156	961
Neighborhood 2	155.49	8.5	471	0	415	442	1,328
Neighborhood 3	151.09	9.9	400	60	601	443	1,504
Neighborhood 4	72.30	7.5	272	0	224	44	540
Miscellaneous	1.00	7.0	7	0	0	0	7
Total	**481.65**	**9.0**	**1,361**	**91**	**1,803**	**1,085**	**4,340***

*The minimum number of residential units required in the West Area is 3,553 (on approximately 385 net residential acres).

TABLE 2-3: WEST AREA SPECIFIC PLAN NON-RESIDENTIAL DEVELOPMENT PROGRAM

MIXED USE COMMERCIAL SUMMARY	
DESCRIPTION	MAXIMUM COMMERCIAL SQUARE FEET
Village Center (Cloverfield)	171,500*
Village Center (Harden)	400,000*
Total Square Feet	**571,500***
PUBLIC FACILITIES SUMMARY	
DESCRIPTION	NET ACRES
High School	38.97
Middle School	20.78
Elementary School (1)	10.98
Elementary School (2)	10.00
Elementary School (3)	10.00
Community Park	30.83
Neighborhood Parks	12.52
Small Parks	6.41
Supplemental Det./Ret. Basins	35.03
Water Wells/Water Treatment	1.5
Total Acres	**177.02**

*The Mixed Use Commercial areas (Village Center) are located on 24.7 net acres.

Public Facilities Summary

Public land uses are those uses that serve the general public and are operated and maintained by public or quasi-public agencies. Land designated for public or semipublic uses such as schools, parks, open space and utility systems are crucial to the Specific Plan's land use concept, and will be subject to the requirements of Article III, Division 7-Public/Semipublic (PS) District of the Salinas Zoning Code except as otherwise required by the Specific Plan or State Law. Public and semipublic land uses in the Specific Plan Area include five schools and three water well sites. Parks and Open Space are further addressed below.

SCHOOLS

A total of five schools will be located within the Specific Plan – three elementary schools, one middle school and one high school. The elementary and middle schools are located within the boundaries of the Santa Rita Union School District. The high school is located within the boundaries of the Salinas Union High School District.

One of the three elementary schools—McKinnon Elementary—has already been constructed in Neighborhood 1. The second elementary school will be located on a 10.0-acre site in Neighborhood 2, while the other will be located on a 10.0-acre site in Neighborhood 3. McKinnon Elementary School currently serves residents of the Harden Ranch area south of Boronda Road and may continue to do so in the future. The two new elementary schools would be expected to serve students residing in the Specific Plan area and adjacent areas. However, attendance areas will ultimately be adopted by the Board of Trustees.

A site is also provided for one middle school in the WASP. The middle school site, approximately 20 acres in size, is proposed adjacent to and north of the community park. The middle school is expected serve students residing in the SPA as well as adjacent areas as determined by attendance areas which are ultimately adopted by the Board of Trustees.

The high school site is located in the northern portion of the Specific Plan Area adjacent to Rogge Road. The site is approximately 38 acres and it has already been acquired by the Salinas Union High School District. The District has previously approved a new high school facility for the site and is moving forward (separate from the WASP) with construction plans for the new facility. The high school, which would include sports fields, a stadium and parking areas, would serve students both within and outside of the Specific Plan Area.

WATER WELL SITES

Three water well sites are proposed within the WASP. The locations are denoted on Figure 2-6: *Specific Plan/Illustrative Plan*. These proposed facilities will be subject to the approval of a Conditional Use Permit by the City and may be subject to further environmental review and permitting from the Monterey County Health Department.

PARKS AND OPEN SPACE LAND USE

A total of 11 parks consisting of a total of 49.76 net acres of public parkland are proposed within the Specific Plan. This acreage slightly exceeds the City's Parkland (Quimby Act) requirements of 3 acres per 1,000 persons which requires 47.78 net acres. Three types of public parks are proposed: community, neighborhood, and small parks.

Except as otherwise provided in the Specific Plan, the parks and open space land uses shall be subject to the requirements of Article III, Division 6 –Parks (P) and Open Space (OS) District of the Salinas Zoning Code, respectively. Further details of the proposed parks are described below:

Community Park: The approximately 30-acre community park will be the focal point of the residential neighborhoods and the entire WASP and would provide a wide variety of amenities and significant open space to both residents of the community and surrounding areas. As the largest park in the City's FGA, it would contain a significant concentration of sports fields as well as passive recreational amenities. The community park would be adjacent to an approximately 10-acre open space area for periodic supplemental storm water detention and retention. This combined area of park and open space totals approximately 40 acres.

Neighborhood Parks: Four neighborhood parks, which vary from approximately 2.35 acres to 3.63 acres in size are proposed. They would serve as focal points within each of the four residential neighborhoods and would provide a variety of amenities and open space to the residents of the WASP and surrounding areas. Proposed features of these parks would include open space for active recreation and areas for passive recreation. Special features may be located within these parks to further enhance the character and identity of the neighborhood that each park serves.

Small Parks: Six small parks, which are 1.86 acres or less in size, and average approximately 1.1 acres, are proposed. These parks will not be characterized by large sports fields that may be found in the community park and some neighborhood parks, but they would provide passive open space

and recreation, and would include seating areas, picnic areas, sports courts, and children's tot lots or playgrounds.

INFRASTRUCTURE, PUBLIC SERVICES, AND UTILITIES

Circulation Network

The WASP circulation system would include a roadway network, a pedestrian and bicycle network, and public transit. Emphasis would be placed on ensuring connectivity between uses and on creating a safe and efficient circulation system that complies with City and/or Specific Plan designs and policies. City street standards adopted for use in development of the FGA would be the basis for street development standards in the WASP. However, the plan would also emphasize facilitating increased daily pedestrian trips by connecting residential neighborhoods to public facilities such as schools and parks, and to retail and employment areas. As such, the street standards for the FGA are supplemented in the Specific Plan with wide sidewalks, landscaped parkways, and other pedestrian-friendly circulation features.

The circulation system would be designed to link with existing City and regional systems. It would also provide standards for potential connections to development in the CASP located to the east of the WASP and the extension of existing vehicular, pedestrian, and bicycle circulation systems to the south, west, and north. Figure 2-7 depicts the proposed vehicular circulation plan for the Specific Plan.

Storm Drainage

The WASP storm water drainage system will need to meet a number of requirements from the City of Salinas, the County of Monterey, and the State of California. These requirements include LID requirements, water quality treatment requirements, and hydro-modification mitigation requirements. In addition, the approach to mitigating storm water impacts will utilize site/parcel-based Post Construction Best Management Practices (PCBMPs) to the maximum extent practicable (MEP) to maximize infiltration and groundwater recharge, filter any storm water runoff to meet water quality requirements, reduce the cost of "grey" infrastructure in favor of "green" infrastructure and mitigate both the post-project peak storm water runoff rates and the post-project storm water runoff volumes, in order to not have a negative impact on any downstream facility.

The storm water conveyance and retention system would include an integrated network of open waterways and drains, underground storm drain pipes, retention basins, supplemental detention/water quality basins, and a wide range of PCBMPs and LID features.

Water Supply

The California Water Company (Cal Water) is a private water company that supplies water to the City of Salinas and could supply potable water to the entire WASP properties. Cal Water is a California Public Utilities Commission (CPUC) regulated water utility which has been providing water service in the area since 1962. A single distribution system provides services to the City of Salinas and Bolsa Knolls while small hydraulically-isolated distribution systems provide services to

the other communities. In compliance with Senate Bill (SB) 610, Cal Water will be submitting a "Will Serve" letter indicating that they will provide water service to the proposed Specific Plan Area. As development of the Specific Plan occurs, existing agricultural wells will be taken out of production.

The Project proposes to construct three wells with a minimum capacity of 1.72 million gallons per day (mgd) each to meet a maximum day demand at full plan development of 2,257.6-acre feet/year with two wells in operation and one well in reserve as a backup. Well locations are chosen on the basis of water quality and potential production capabilities. According to Cal Water's Assessment Report, it is expected that the proposed wells within the WASP have a high probability of meeting drinking water quality standards. As a hedge against possible future changes in water quality, Cal Water may make provisions for on-site treatment with the design of the wells for the WASP development.

The proposed on-site water distribution system would be looped to maintain water quality and would be sized for minimum system pressures of 20 pounds per square inch (psi) at maximum day demand plus fire flow. The fire flow requirement for the WASP is 1,500 gallons per minute (gpm) for a minimum of two hours. Under peak day demand, the system would deliver the required flows with a minimum of 40 pounds per square inch (psi) residual pressure. The proposed system would tie into Cal Water's existing system on San Juan Grade Road, Russell Road, Rogge Road, Natividad Road, and East Boronda Road. The West Area would be served by 12-inch diameter and 16-inch diameter main trunk lines and 8-inch diameter distribution lines branching off the trunk lines and serving individual streets.

Utilizing site/parcel-based post construction BMPs to enhance storm water infiltration to the maximum extent practicable will enhance groundwater recharge and in turn, future available supply of potable water. Extensive use of native and naturalizing species is proposed where appropriate to reduce water demands and adapt well to the soil and wind conditions. The WASP will implement a Water Conservation program requiring the use of low-flow toilets and shower heads, demand-controlled irrigation systems, and other measures as required by the City. All landscaping and irrigation in the WASP shall comply with the City's Water Conservation Ordinance, Water Efficient Landscape Ordinance and other requirements. Table 2-4 provides a water demand estimate for the proposed project.

TABLE 2-4: WATER DEMAND ESTIMATE (ACRE-FEET PER YEAR)

USE	CALCULATION[1]	ACRE FEET PER YEAR
Retail/Services	571,500 s.f. @ 0.335 gal/s.f./day = 191,453 gpd	214.4
Residential	87.57 gal/resident @ 3.67 residents/unit = 321.4 gal/unit/day	1,562.3
Schools	90.95 acres @ 3,500 gal/acre/day = 318,325 gpd	356.5
Parks	49.76 acres @ 2,232 gal/acre/day = 111,064 gpd	124.4
TOTAL		**2,257.6**

[1] Final Supplement for the Salinas General Plan Program EIR, Appendix E, Water Supply Assessment – Cal Water

Sanitary Sewer System

The City of Salinas provides its residents with sewer collection facilities and maintenance. The Monterey Regional Water Pollution Control Agency (MRWPCA) provides regional wastewater conveyance, treatment, disposal, and wastewater recycling services to customers in northern Monterey County including the City of Salinas. The MRWPCA serves the City with the Salinas Pump Station and the Salinas interceptor. Sewage trunk line conveyance, treatment, and disposal for the West Area will be provided by the MRWPCA.

The sewer collection system for the Specific Plan Area will be connected to the existing 24-inch sewer trunk line on McKinnon Street at the intersection with East Boronda Road. However, the elevation at the connection point on McKinnon Street and the lowest point of the northwest area of the Specific Plan Area are very similar, making it difficult to connect the proposed sewer collection system for the northwest area to the existing 24-inch sewer system on McKinnon Street. Therefore, the proposed sewer collection system for the northwest area of the Specific Plan Area may need to be connected to the existing 10-inch sewer system on Van Buren Avenue near San Juan Grade Road. The proposed sewer collection system for the remainder of the Specific Plan Area would connect to the aforementioned existing 24-inch sewer trunk line on McKinnon Street. The City would provide and maintain sewer collection once the West Area development is established. All the proposed sanitary sewer collection system would convey flow to the City's existing sewers by gravity without the need of any sewer pump station. Table 2-5 provides a sewer generation estimate for the proposed project.

TABLE 2-5: SEWER GENERATION ESTIMATE

USE	CALCULATION	ACRE FEET PER YEAR	AVERAGE GPD
Retail/Services	214.4 af/yr. @ 90%[(1)]	193.0	172,321
Residential	1,562.3 af/yr. @ 50%[(2)]	781.2	697,464
Schools	356.5 af/yr. @ 50%[(2)]	178.3	159,188
TOTAL		**1,152.5**	**1,028,973**

[(1)] A typical estimate for retail/services sewer demand is 90% of water demand

[(2)] A typical estimate for residential and school sewer demand is 50% of water demand. Approximately 50% of residential and school water is used for landscape irrigation.

Monterey Salinas Transit (MST)

MST may provide transit service to the West area from bus stops located within the Specific Plan and along its perimeter. Existing bus stops along Boronda Road currently provide service to the site.

Electricity and Natural Gas

Pacific Gas and Electric Company (PG& E) provides electrical services to the City of Salinas and will provide this service to the Plan Area. PG&E indicates that sufficient primary line power service exists in proximity of the proposed site. A 12kV underground primary line exists along Boronda Road which will be extended into the project. PG&E also currently operates a 60kV overhead power line easement that extends through the WASP area.

PG&E also provides natural gas service for the City and will provide gas service to the site. PG&E will need to extend their existing gas service from existing lines located on Boronda Road into the project. Table 2-6 provides an electricity demand estimate for the proposed project. Table 2-7 provides a natural gas demand estimate for the proposed project.

TABLE 2-6: ESTIMATED ELECTRICITY DEMAND

USE	USAGE FACTOR (KWY/MONTH)	PROJECT	ESTIMATED MONTHLY USAGE (KWH)
Retail/Services	15.5 per s.f.[1]	571,500 s.f.	738,188
Residential	909 per du[2]	4,340 du	3,945,060
Schools	17,736 per acre[3]	90.95 acres	1,613,089
TOTAL			**6,296,337**

[1] 2003 U.S. Energy Information Administration Commercial Building Energy Consumption Survey
[2] Average annual electricity consumption per residential customer, U.S. Energy Information Administration
[3] SUHSD New High School #5 Construction, Subsequent EIR

TABLE 2-7: ESTIMATED NATURAL GAS DEMAND

USE	USAGE FACTOR (THERMS)	PROJECT	ESTIMATED MONTHLY USAGE (THERMS)
Retail/Services	0.0225/s.f./month[1]	571,000	12,848
Residential	40.25/unit/month[2]	4,340	174,685
Schools	0.0225/s.f./month[3]	495,000(3)	11,138
TOTAL			**198,671**

(1) 2003 U.S. Energy Information Administration, Commercial Building Energy Consumption Survey
(2) California Residential Natural Gas Consumption, California Energy Commission
(3) School Estimated square feet: 85,000 s.f. for Elementary School, 125,000 s.f. for Middle School and 200,000 s.f. for High School

Telecommunications

Extension of existing underground networks adjacent to the Specific Plan Area will be required to provide cable television, internet and telecommunication service to the site. Dark fiber conduit will be installed at a minimum along and within all arterial streets within or fronting the Specific Plan Area.

Solid Waste Management and Recycling

Solid Waste generated within the Specific Plan Area is collected by Republic Services of Salinas and delivered to the Salinas Valley Solid Waste Authority (SVSWA) Transfer Station that then transports the collected refuse to the Johnson Canyon Landfill which SVSWA owns and operates by contract. It is estimated that the landfill has 30 years of disposal capacity to meet the need of current jurisdiction served by the landfill. SVSWA has proposed a comprehensive approach to providing for solid waste disposal needs of its member jurisdictions for approximately 70 years which includes increased waste division and materials recovery as well as the application of advanced technologies for processing solid waste. In addition to providing sufficient long-term capacity, the SVSWA facility improvements would increase the ability of SVSWA's member jurisdictions to achieve their Assembly Bill (AB) 939 diversion mandates. Table 2-8 provides a solid waste generation estimate for the proposed project.

TABLE 2-8: ESTIMATED SOLID WASTE GENERATION

LAND USE	GENERATION FACTOR[1]	PROJECT	ESTIMATED SOLID WASTE GENERATION (LB./DAY)
Retail/Services	6 lb./1,000 s.f./day	571,000 s.f.	3,426
Residential	10 lb./unit/day	4,340 units	43,400
Schools	0.5 lb./student/day	4,191 students	2,096
TOTAL			**48,922**

[1] Cal Recycle

PHASING

The Specific Plan Area is owned by 11 individual entities, as identified in Figure 2-4 and Table 2-1. Two of these owners are school districts, the remaining are individual private owners. All of these ownerships border one or more existing public streets that contain, or are planned to contain, most of the utility infrastructure necessary to support development. The Specific Plan is designed such that each current institutional or individual owner may develop their property independent of development by other property owners. An agreement among the property owners allows for this independent development by permitting any developing ownership to obtain from adjoining ownerships the access and easements necessary for roadways or utilities to support development of their individual property.

The public schools and public facilities will be constructed based on projections of the need for these facilities as the Specific Plan Area and surrounding area develop. Similarly, the Village Center will be constructed based on local and regional market demand for such retail and commercial services.

In general, phasing of residential development within these individual ownerships is projected to proceed from the surrounding arterial and collector streets toward the center of the Specific Plan Area. However, exceptions to this can occur for the development of a school, initiation of the community park, or development of a specific residential property. In such instances roads and utility infrastructure would be extended into more central areas of the Specific Plan Area to serve those projects.

Each phase of the development will be graded and all erosion control measures will be required to be installed in accordance with a SWPP. Infrastructure improvements required for each phase will include but are not limited to all frontage improvements, storm drainage, sanitary sewer, water line, wet and dry utilities, and other improvements as determined by the City to serve the needs of the subject phase and/or comply with the Mitigation Monitoring and Reporting Program (MMRP). The phasing of the small and neighborhood parks and certain public improvements could also be subject to a Development Agreement.

PLAN ADOPTION AND REGULATION

The Salinas General Plan requires the approval of Specific Plans prior to development of any land in the FGA. The Development Regulations and Design Standards not established through the Specific Plan shall be those established in the applicable regulations of the City of Salinas Zoning

Code. Where there is a conflict between the Specific Plan and the Zoning Code, the Specific Plan would prevail.

The Specific Plan is intended to be adopted by the City Council and to serve as a tool for the City of Salinas to implement. The Specific Plan is to be used by designers, developers, builders, and planners, to guide development of the Project Area. The land use, development standards, and design guidelines are provided to ensure that all proposed developments remain consistent with the vision established by the Specific Plan as the Project is built over time. The Specific Plan development concepts, design guidelines, and standards are in accordance with the City's General Plan, Municipal Ordinances, and City Specifications. The Specific Plan shall be used to review, process, and approve development proposals for the Project site including but not limited to site specific development applications and site improvement plans.

PROJECT ENTITLEMENTS

The City of Salinas will be the Lead Agency for the proposed project, pursuant to the State Guidelines for Implementation of the California Environmental Quality Act (CEQA), Section 15050. Actions that would be required from the City include, but are not limited to the following:

- Certification of the Environmental Impact Report (EIR) and adoption of the Mitigation Monitoring and Reporting Program (MMRP)
- Approval of the proposed West Area Specific Plan

An application for rezoning of the Specific Plan Area from New Urbanism Interim (NI) with a Specific Plan Overlay to Neighborhood Edge (NE)/Low Density Residential, Neighborhood General 1 (NG-1)/Medium Density Residential, Neighborhood General 2 (NG-2)/High Density Residential, Village Center (VC), Public/Semipublic (PS), Parks (P) and Open Space (OS), with the applicable Specific Plan Overlay District has not been filed at this time, but is required to be filed. A Development Agreement application, Tentative Parcel Map application, and Vesting Tentative Tract Map application would also need to be filed.

However, the EIR will analyze the total impacts of the WASP, including these applications yet unfiled, so that future filings will not require separate environmental analysis as long as development proposed does not substantially deviate from the approved Specific Plan.

2.4 USES OF THE EIR AND REQUIRED AGENCY APPROVALS

The City of Salinas will be the Lead Agency for the proposed project, pursuant to the State Guidelines for Implementation of the California Environmental Quality Act (CEQA), Section 15050. Actions that would be required from the City include, but are not limited to the following:

- Certification of the Environmental Impact Report (EIR) and adoption of the MMRP.
- Approval of the proposed West Area Specific Plan.
- Rezoning of the Specific Plan area from New Urbanism Interim (NI) with a Specific Plan Overlay to Neighborhood Edge (NE)/Low Density Residential, Neighborhood General 1 (NG-1)/Medium Density Residential), Neighborhood General 2 (NG-2)/High Density

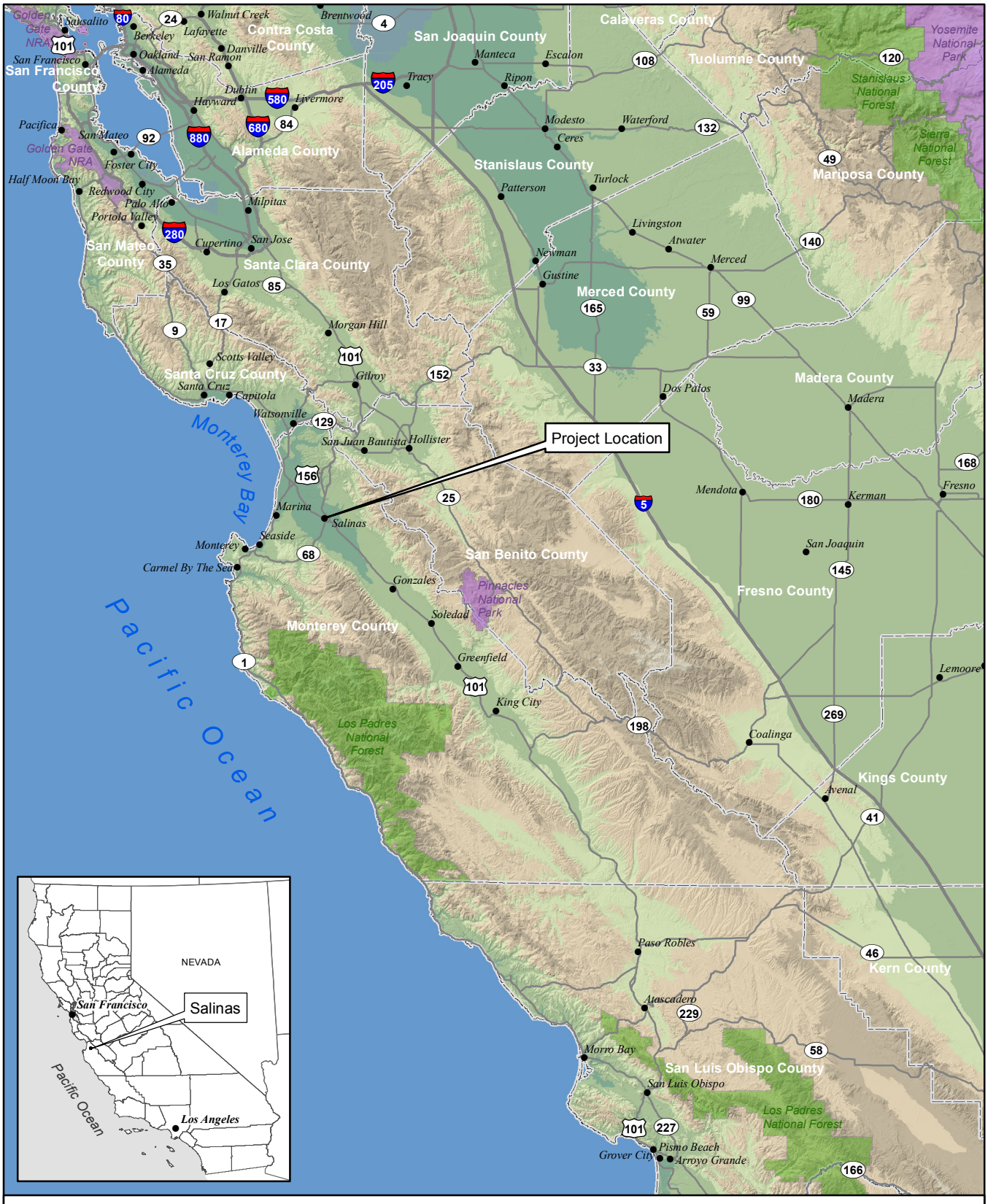
Residential, Village Center (VC), Public/Semipublic (PS), Parks (P) and Open Space (OS). A Specific Plan Overlay District is also applicable to each Zoning District.

- Tentative Parcel Map.
- Vesting Tentative Tract Map.
- Development Agreement.

A list of other public agencies whose approvals may be required include, but are not limited to the following:

- Monterey Bay Unified Air Pollution Control District: Demolition permit
- Central Coast Region - Regional Water Quality Control Board: National Pollution Discharge Elimination System (NPDES) general construction permit
- Monterey Regional Water Pollution Control Agency
- Monterey County
- Monterey County Water Resources Agency
- Central Coast Regional Water Quality Control Board
- Salinas Valley Solid Waste Authority

This page left intentionally blank.



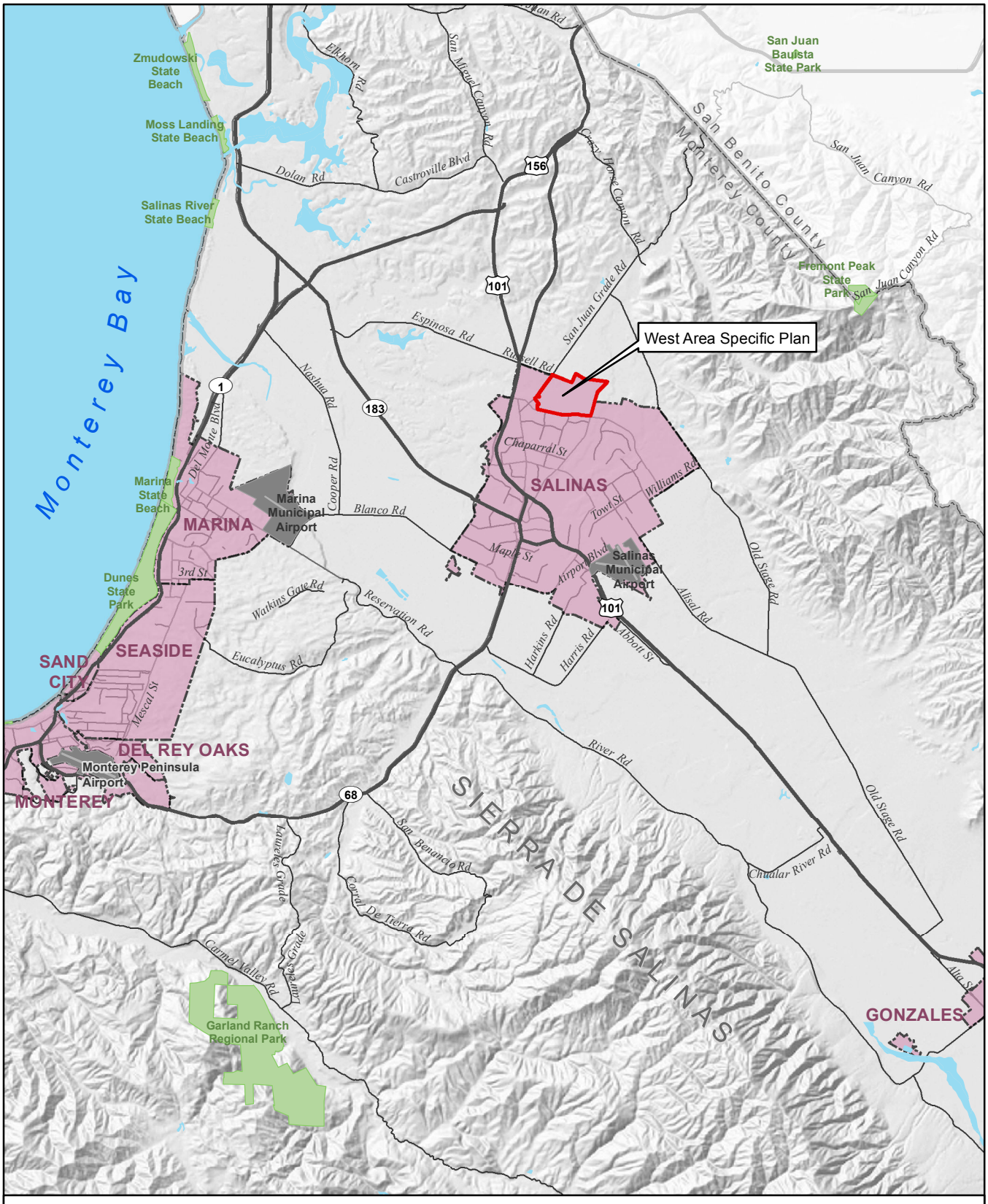
CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 2-1: Regional Map

Sources: California Spatial Information Library; National Park Service. Map date: June 24, 2015.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.



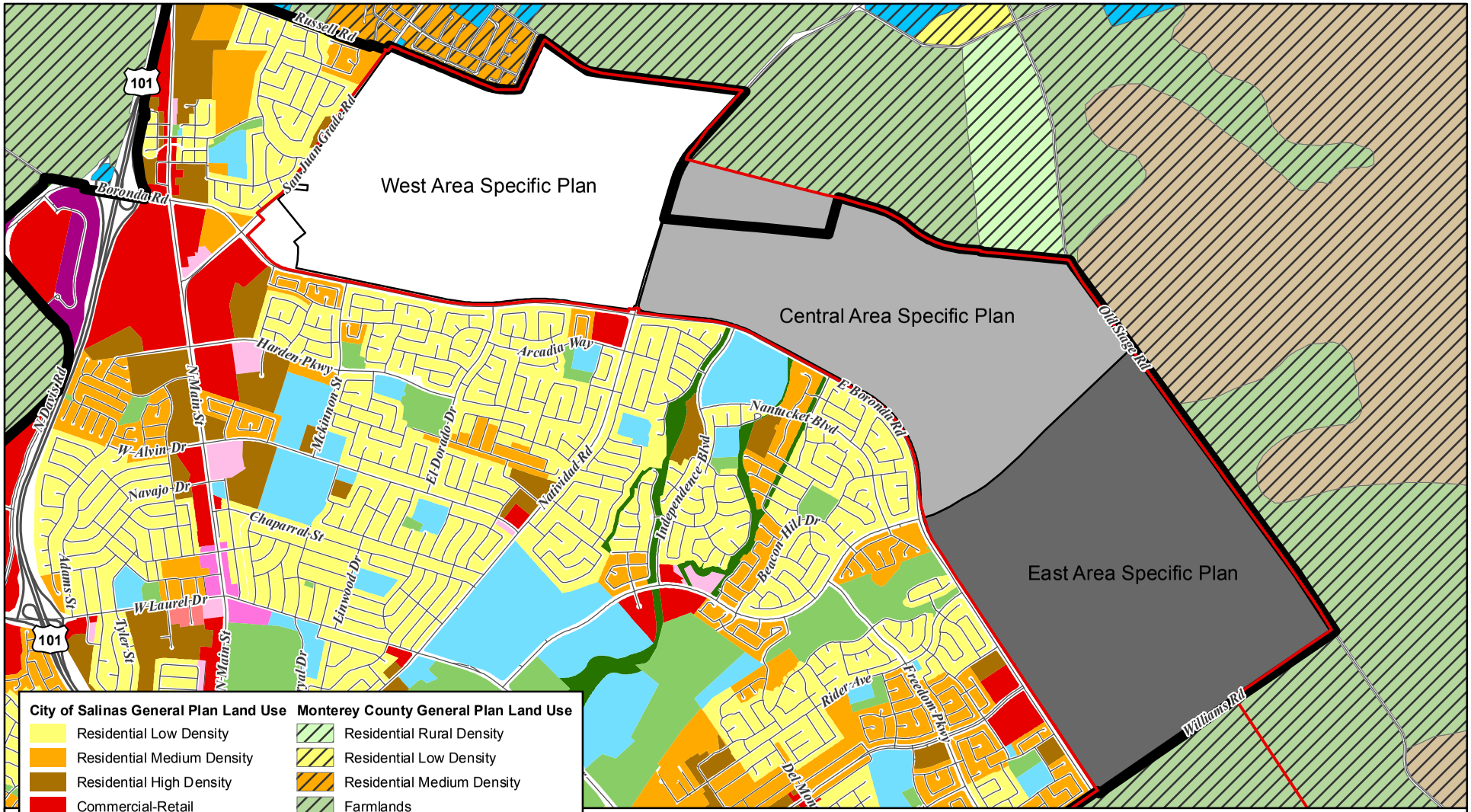
CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 2-2: Vicinity Map

Sources: California Spatial Information Library; ESRI StreetMap North America; Monterey County GIS. Map date: June 25, 2015.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.



Sources: City of Salinas; Monterey County GIS. Map date: June 30, 2015.

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 2-3: Adjacent Land Uses

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

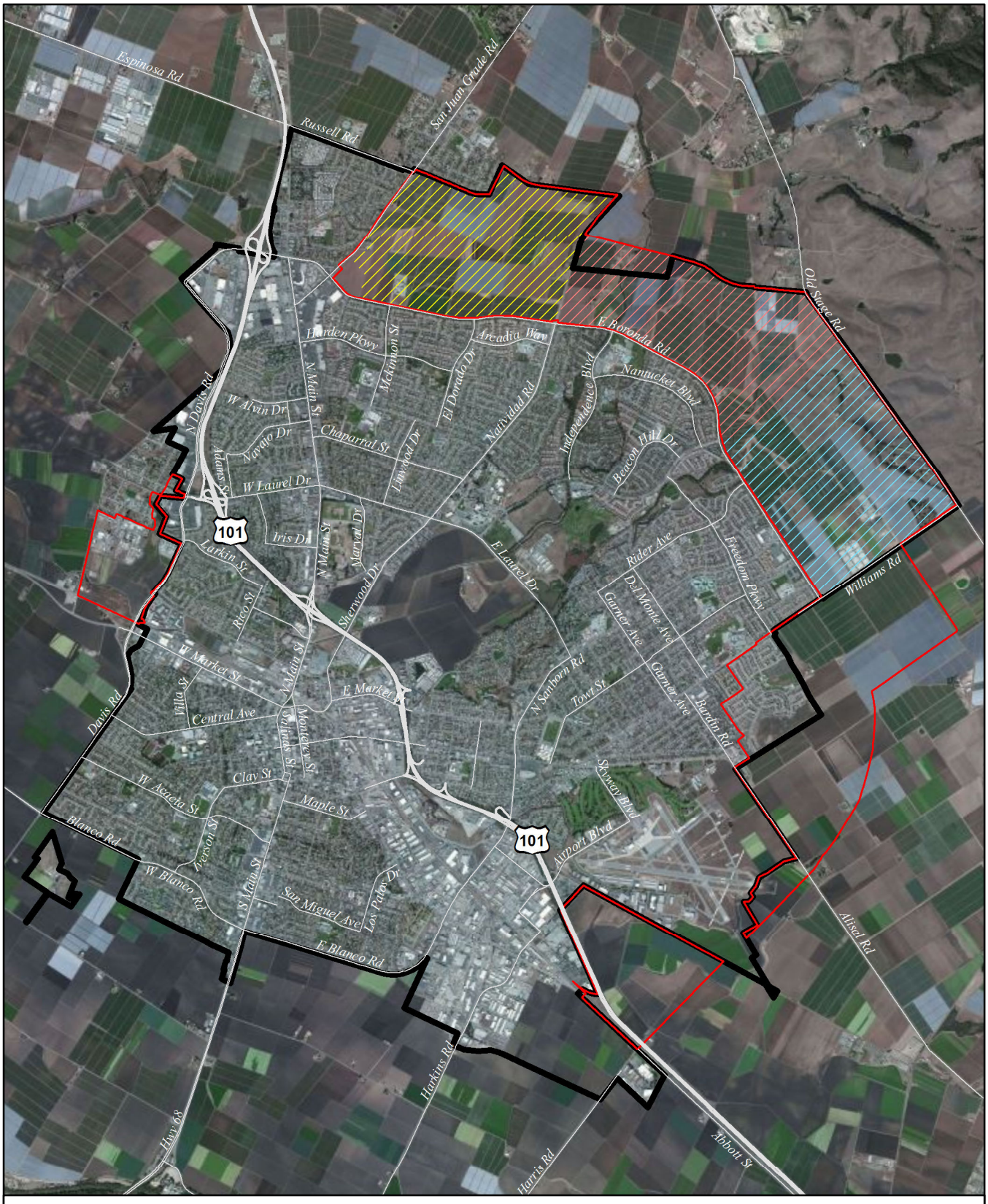
This page left intentionally blank.

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 2-4: Existing Conditions

Source: City of Salinas, AECOM.

This page left intentionally blank.



City of Salinas
Future Growth Area
West Area Specific Plan
Central Area Specific Plan
East Area Specific Plan

N

0 0.5 1
Miles

Sources: Monterey County GIS. Map date: June 30, 2015.

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 2-5: Aerial View

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

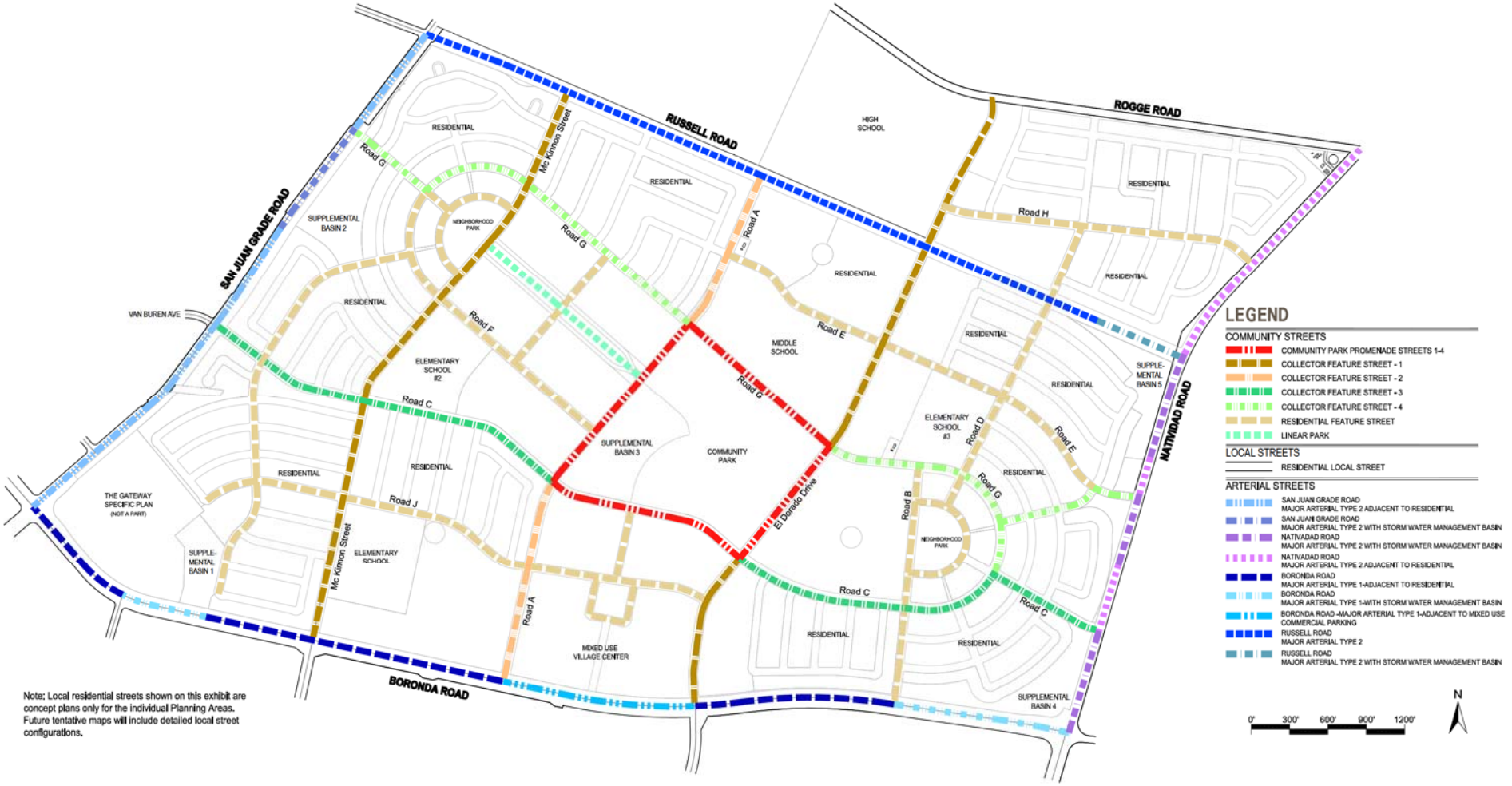
This page left intentionally blank.

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 2-6: Specific Plan/Illustrative Plan

Source: City of Salinas, AECOM.

This page left intentionally blank.



CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 2-7: Vehicular Circulation Plan

Source: City of Salinas, AECOM.

This page left intentionally blank.

This section describes the regional air quality, current attainment status of the air basin, local sensitive receptors, emission sources, and impacts that are likely to result from WASP implementation. Following this discussion is an assessment of consistency of the WASP with applicable policies and local plans. The Greenhouse Gases and Climate Change analysis is located in Section 3.4. This section is based in part on the following technical studies: *Air Quality and Land Use Handbook: A Community Health Perspective* (California Air Resources Board, 2005)*, CEQA Air Quality Guidelines* (MBARD, 2008a), *Monterey Bay Unified Air Pollution Control District 2008 Air Quality Management Plan (2008 AQMP)* (MBARD, 2008b), *Monterey Bay Unified Air Pollution Control District Triennial Plan Revision 2009-2011* (MBARD, 2013), CalEEMod *(v.2016.3.2)* (CAPCOA, 2013), and the *Salinas West Area Specific Plan Draft Transportation Impact Analysis* (Fehr & Peers, 2018). It should be noted that the Monterey Bay Unified Air Pollution Control District (MBUAPCD) recently changed their name to Monterey Bay Air Resources District (MBARD). No comment letters regarding this topic were provided during the NOP comment period.

3.1.1 EXISTING SETTING

NORTH CENTRAL COAST AIR BASIN

The North Central Coast Air Basin (NCCAB) consists of three counties: Santa Cruz County, San Benito County, and Monterey County. The air basin is bounded by mountains the north and east. San Joaquin Air Basin lies to the east, separated by the Diablo Coastal range, with gaps such as Pacheco Pass. The San Francisco Bay Air Basin lies to the north. Figure 3.1-1 illustrates the location of the Monterey County within the NCCAB. Figure 3.1-1 also illustrates the location of the MBARD in relation to neighboring air districts.

The air basin includes portions of several mountain ranges: the Santa Lucia and Gabilan Ranges in Monterey and San Benito Counties, the southern portion of the Santa Cruz Mountains in Santa Cruz County, and the Diablo Range in the eastern half of San Benito County. The coastal terraces in the Santa Cruz area, the flat plains surrounding Watsonville, Salinas, and King City, and the southern Santa Clara Valley are sharply defined by the various mountain ranges.

The NCCAB covers approximately 5,129 square miles of the central coast of California. With Monterey County covering over 3,320 square miles and Santa Cruz County covering only 445 square miles, the air basin consists of one of the largest and one of the smallest counties in the state. Neighboring air basins include the San Francisco Bay Area Air Basin (SFBAAB), the San Joaquin Valley Air Basin (SJVAB), and the San Luis Obispo Air Basin (SLOAB).

Climate and Air Movement

Regional meteorology in the vicinity of the Plan Area is largely dominated by a persistent high-pressure area which commonly resides over the eastern Pacific Ocean. Mild temperatures are the rule throughout the year due to the moderating influence of the Pacific Ocean. The City of Salinas lies close enough to the Pacific Ocean to receive this moderating influence; the difference in average high and low daily temperatures within the City between winter and summer months does not change by more than approximately 15 degrees Fahrenheit.

The semi-permanent high-pressure cell in the eastern Pacific is the basic controlling factor in the climate of the Basin. Monterey Bay is an inlet 25 miles wide, which allows marine air at low levels to penetrate the interior. In the summer, the high-pressure cell is dominant and causes persistent west and northwest winds over the entire California coast. At Salinas, near the northern end of the Valley, west and northwest winds occur about one-half the time during the entire year. Air descends in the Pacific High forming a stable temperature inversion of hot air over a cool coastal layer of air. The onshore air currents pass over cool ocean waters to bring fog and relatively cool air into the coastal valleys. The warmer air loft acts as a lid to inhibit vertical air movement (MBARD, 2008a). During the winter, the Pacific High migrates southward and has less influence on the air basin. Air frequently flows in a southeasterly direction out of the Salinas and San Benito Valleys, especially during night and morning hours. The general absence of deep, persistent inversions and the occasional storm systems usually result in good air quality for the basin as a whole in winter and early spring.

In the fall, surface winds become weak, and the marine layer grows shallow, dissipating altogether on some days. The air flow is occasionally reversed in a weak offshore movement, and the relatively stationary air mass is held in place by the Pacific High-pressure cell, which allows pollutants to build over a period of a few days. It is most often during this season that the north or east winds transport pollutants from either the San Francisco Bay area or the Central Valley into the NCCAB.

CRITERIA POLLUTANTS

The United States Environmental Protection Agency (EPA) uses six "criteria pollutants" as indicators of air quality, and has established for each of them a maximum concentration above which adverse effects on human health may occur. These threshold concentrations are called National Ambient Air Quality Standards (NAAQS). Each criteria pollutant is described below.

Ozone (O_3) is a photochemical oxidant and the major component of smog. While O_3 in the upper atmosphere is beneficial to life by shielding the earth from harmful ultraviolet radiation from the sun, high concentrations of O_3 at ground level are a major health and environmental concern. O_3 is not emitted directly into the air but is formed through complex chemical reactions between precursor emissions of volatile organic compounds (VOC) and oxides of nitrogen (NO_x) in the presence of sunlight. These reactions are stimulated by sunlight and temperature so that peak O_3 levels occur typically during the warmer times of the year. Both VOCs and NO_x are emitted by transportation and industrial sources. VOCs are emitted from sources as diverse as autos, chemical manufacturing, dry cleaners, paint shops and other sources using solvents. Relatedly, reactive organic compounds (ROG) are defined as the subset of VOCs that are reactive enough to contribute substantially to atmospheric photochemistry.

The reactivity of O_3 causes health problems because it damages lung tissue, reduces lung function and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of O_3 not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Exposure to O_3 for several hours at relatively low concentrations has been found to significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise. This decrease in lung function generally is accompanied by symptoms including chest pain, coughing, sneezing and pulmonary congestion.

Carbon monoxide (CO) is a colorless, odorless and poisonous gas produced by incomplete burning of carbon in fuels. When CO enters the bloodstream, it reduces the delivery of oxygen to the body's organs and tissues. Health threats are most serious for those who suffer from cardiovascular disease, particularly those with angina or peripheral vascular disease. Exposure to elevated CO levels can cause impairment of visual perception, manual dexterity, learning ability and performance of complex tasks.

Nitrogen dioxide (NO_2) is a brownish, highly reactive gas that is present in all urban atmospheres. NO_2 can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections. Nitrogen oxides are an important precursor both to ozone and acid rain, and may affect both terrestrial and aquatic ecosystems. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO_x). NO_x plays a major role, together with VOCs, in the atmospheric reactions that produce O_3. NO_x forms when fuel is burned at high temperatures. The two major emission sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers.

Sulfur dioxide (SO_2) affects breathing and may aggravate existing respiratory and cardiovascular disease in high doses. Sensitive populations include asthmatics, individuals with bronchitis or emphysema, children and the elderly. SO_2 is also a primary contributor to acid deposition, or acid rain, which causes acidification of lakes and streams and can damage trees, crops, historic buildings and statues. In addition, sulfur compounds in the air contribute to visibility impairment in large parts of the country. This is especially noticeable in national parks. Ambient SO_2 results largely from stationary sources such as coal and oil combustion, steel mills, refineries, pulp and paper mills and from nonferrous smelters.

Particulate matter (PM) includes dust, dirt, soot, smoke and liquid droplets directly emitted into the air by sources such as factories, power plants, cars, construction activity, fires and natural windblown dust. Particles formed in the atmosphere by condensation or the transformation of emitted gases such as SO_2 and VOCs are also considered particulate matter.

Based on studies of human populations exposed to high concentrations of particles (sometimes in the presence of SO_2) and laboratory studies of animals and humans, there are major effects of concern for human health. These include effects on breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular disease, alterations in the body's defense systems against foreign materials, damage to lung tissue, carcinogenesis and premature death.Respirable particulate matter (PM_{10}) consists of small particles, less than 10 microns in diameter, of dust, smoke, or droplets of liquid which penetrate the human respiratory system and cause irritation by themselves, or in combination with other gases. Particulate matter is caused primarily by dust from grading and excavation activities, from agricultural activities (as created by soil preparation activities, fertilizer and pesticide spraying, weed burning and animal husbandry), and from motor vehicles, particularly diesel-powered vehicles. PM_{10} causes a greater health risk than larger particles, since these fine particles can more easily penetrate the defenses of the human respiratory system.

Fine particulate matter ($PM_{2.5}$) consists of fine particles, which are less than 2.5 microns in size. Similar to PM_{10}, these particles are primarily the result of combustion in motor vehicles, particularly diesel engines, as well as from industrial sources and residential/agricultural activities such as burning. It is also formed through the reaction of other pollutants. As with PM_{10}, these particulates can increase the chance of respiratory disease, and cause lung damage and cancer. In 1997, the EPA created new Federal air quality standards for $PM_{2.5}$.

The major subgroups of the population that appear to be most sensitive to the effects of particulate matter include individuals with chronic obstructive pulmonary or cardiovascular disease or influenza, asthmatics, the elderly and children. Particulate matter also impacts soils and damages materials, and is a major cause of visibility impairment.

Lead (Pb) exposure can occur through multiple pathways, including inhalation of air and ingestion of Pb in food, water, soil or dust. Excessive Pb exposure can cause seizures, mental retardation and/or behavioral disorders. Low doses of Pb can lead to central nervous system damage. Recent studies have also shown that Pb may be a factor in high blood pressure and subsequent heart disease.

AMBIENT AIR QUALITY STANDARDS

Both the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. These ambient air quality standards represent safe levels of contaminants that avoid specific adverse health effects associated with each pollutant.

The federal and California state ambient air quality standards are summarized in Table 3.1-1 for important pollutants. The federal and state ambient standards were developed independently, although both processes attempted to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent. This is particularly true for ozone, $PM_{2.5}$, and PM_{10}.

The U.S. Environmental Protection Agency established new national air quality standards for ground-level ozone and for fine particulate matter in 1997. The 1-hour ozone standard was phased out and replaced by an 8-hour standard of 0.075 PPM. Implementation of the 8-hour standard was delayed by litigation, but was determined to be valid and enforceable by the U.S. Supreme Court in a decision issued in February of 2001. In April 2005, the CARB approved a new eight-hour standard of 0.070 ppm and retained the one-hour ozone standard of 0.09 after an extensive review of the scientific literature. The U.S. EPA signed a final rule for the federal ozone eight-hour standard of 0.070 ppm on October 1, 2015, and was effective as of December 28, 2015.

TABLE 3.1-1: FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

POLLUTANT	*AVERAGING TIME*	*FEDERAL PRIMARY STANDARD*	*STATE STANDARD*
Ozone	1-Hour 8-Hour	-- 0.070 ppm	0.09 ppm 0.070 ppm
Carbon Monoxide	8-Hour 1-Hour	9.0 ppm 35.0 ppm	9.0 ppm 20.0 ppm
Nitrogen Dioxide	Annual 1-Hour	0.053 ppm 0.100 ppm	0.03 ppm 0.18 ppm
Sulfur Dioxide	Annual 24-Hour 1-Hour	0.03 ppm 0.14 ppm 0.075 ppm	-- 0.04 ppm 0.25 ppm
PM_{10}	Annual 24-Hour	-- 150 ug/m^3	20 ug/m^3 50 ug/m^3
$PM_{2.5}$	Annual 24-Hour	12 ug/m^3 35 ug/m^3	12 ug/m^3 --
Lead	30-Day Avg. 3-Month Avg.	-- 0.15 ug/m^3	1.5 ug/m^3 --

Notes: ppm = parts per million, ug/m3 = Micrograms per Cubic Meter
SOURCE: CALIFORNIA AIR RESOURCES BOARD, 2017A.

In 1997, new national standards for fine particulate matter diameter 2.5 microns or less ($PM_{2.5}$) were adopted for 24-hour and annual averaging periods. The existing PM_{10} standards were retained, but the method and form for determining compliance with the standards were revised.

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated despite the absence of criteria documents. The identification, regulation and monitoring of TACs is relatively recent compared to that for criteria pollutants. Unlike criteria pollutants, TACs are regulated on the basis of risk rather than specification of safe levels of contamination.

Existing air quality concerns within Monterey County and the entire NCCAB are related to increases of regional criteria air pollutants (e.g., ozone and particulate matter), exposure to toxic air contaminants, odors, and increases in greenhouse gas emissions contributing to climate change. The primary source of ozone (smog) pollution is motor vehicles which account for 70 percent of the ozone in the region. Particulate matter is caused by dust, primarily dust generated from construction and grading activities, and smoke which is emitted from fireplaces, wood-burning stoves, and agricultural burning.

Attainment Status

In accordance with the California Clean Air Act (CCAA), the CARB is required to designate areas of the state as attainment, nonattainment, or unclassified with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria.

Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of

the classifications. An "unclassified" designation signifies that the data do not support either an attainment or nonattainment status. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The U.S. EPA designates areas for ozone, carbon monoxide, and nitrogen dioxide as "does not meet the primary standards," "cannot be classified," or "better than national standards." For sulfur dioxide, areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than national standards." However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used.

Monterey County has a state designation of nonattainment for ozone and PM_{10}, and is either Unclassified or Attainment for all other criteria pollutants. Monterey County has a national designation of either Unclassified or Attainment for all criteria pollutants. Table 3.1-2 presents the state and nation attainment status for Monterey County.

TABLE 3.1-2: STATE AND NATIONAL ATTAINMENT STATUS

CRITERIA POLLUTANTS	*STATE DESIGNATIONS*	*NATIONAL DESIGNATIONS*
Ozone (O_3)	Nonattainment-Transitional	Unclassified/Attainment
PM_{10}	Nonattainment	Unclassified
$PM_{2.5}$	Attainment	Unclassified/Attainment
Carbon Monoxide (CO)	Attainment	Unclassified/Attainment
Nitrogen Dioxide (NO_2)	Attainment	Unclassified/Attainment
Sulfur Dioxide (SO_2)	Attainment	Unclassified
Sulfates	Attainment	
Lead	Attainment	Unclassified/Attainment
Hydrogen Sulfide	Unclassified	
Visibility Reducing Particles	Unclassified	

SOURCES: CALIFORNIA AIR RESOURCES BOARD, 2017B.

Northern Central Coast Air Basin Monitoring

The NCCAB consists of three counties: Santa Cruz County, San Benito County, and Monterey County. The MBARD and the CARB maintain numerous air quality monitoring sites throughout each county in the Air Basin to measure ozone, $PM_{2.5}$, and PM_{10}. It is important to note that the federal ozone 1-hour standard was revoked by the EPA and is no longer applicable for federal standards. Data obtained from the monitoring sites throughout the NCCAB between 2014 and 2016 (latest year of data available) is summarized in Table 3.1-3, Table 3.1-4, and Table 3.1-5.

TABLE 3.1-3 NCCAB AMBIENT AIR QUALITY MONITORING DATA SUMMARY - OZONE

Year	Days > Standard				1-Hour Observations			8-Hour Averages				Year Coverage	
	State		National			State	Nat'l	State		National			
	1-Hr	8-Hr	1-Hr	8-Hr	Max.	D.V.[1]	D.V.[2]	Max.	D.V.[1]	Max.	D.V.[2]	Min	Max
2016	1	5	0	5	0.101	0.08	0.086	0.978	0.077	0.078	0.069	98	100
2015	0	0	0	0	0.079	0.08	0.079	0.068	0.076	0.068	0.068	89	100
2014	0	3	0	3	0.083	0.08	0.084	0.076	0.076	0.075	0.070	28	100

NOTES: ALL CONCENTRATIONS EXPRESSED IN PARTS PER MILLION. THE NATIONAL 1-HOUR OZONE STANDARD WAS REVOKED IN JUNE 2005 AND IS NO LONGER IN EFFECT. STATISTICS RELATED TO THE REVOKED STANDARD ARE SHOWN IN ITALICS. D.V. [1]= STATE DESIGNATION VALUE . D.V. [2]= NATIONAL DESIGN VALUE.

SOURCES: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR IADAM) AIR POLLUTION SUMMARIES

TABLE 3.1-4 NCCAB AMBIENT AIR QUALITY MONITORING DATA SUMMARY - $PM_{2.5}$

Year	Est. Days > Nat'l '06 Std.	Annual Average		Nat'l Ann. Std. D.V.[1]	State Annual D.V.[2]	Nat'l '06 Std. 98th Percentile	Nat'l '06 24-Hr Std. D.V.[1]	High 24-Hour Average		Year Coverage	
		Nat'l	State					Nat'l	State	Min.	Max.
2016	11.9	6.9	6.9	6.6	7	56.6	27	104.7	104.7	96	99
2015	1.0	6.3	6.3	6.4	7	19.8	13	43.2	43.2	98	100
2014	0	6.5	6.5	6.1	7	44.1	14	49.6	49.6	31	99

NOTES: ALL CONCENTRATIONS EXPRESSED IN PARTS PER MILLION. STATE AND NATIONAL STATISTICS MAY DIFFER FOR THE FOLLOWING REASONS: STATE STATISTICS ARE BASED ON CALIFORNIA APPROVED SAMPLERS, WHEREAS NATIONAL STATISTICS ARE BASED ON SAMPLERS USING FEDERAL REFERENCE OR EQUIVALENT METHODS. STATE AND NATIONAL STATISTICS MAY THEREFORE BE BASED ON DIFFERENT SAMPLERS. STATE CRITERIA FOR ENSURING THAT DATA ARE SUFFICIENTLY COMPLETE FOR CALCULATING VALID ANNUAL AVERAGES ARE MORE STRINGENT THAN THE NATIONAL CRITERIA. D.V. [1]= STATE DESIGNATION VALUE . D.V. [2]= NATIONAL DESIGN VALUE

SOURCES: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR IADAM) AIR POLLUTION SUMMARIES

TABLE 3.1-5: NCCAB AMBIENT AIR QUALITY MONITORING DATA SUMMARY – PM_{10}

Year	Est. Days > Std.		Annual Average		3-Year Average		High 24-Hr Average		Year Coverage
	Nat'l	State	Nat'l	State	Nat'l	State	Nat'l	State	
2016	0	ND*	26.0	ND*	25	ND*	71.4	ND	0
2015	0	ND*	24.5	ND*	26	ND*	72.6	ND	0
2014	0	ND*	25.9	ND*	26	ND*	99.2	ND	0

NOTES: THE NATIONAL ANNUAL AVERAGE PM_{10} STANDARD WAS REVOKED IN DECEMBER 2006 AND IS NO LONGER IN EFFECT. AN EXCEEDANCE IS NOT NECESSARILY A VIOLATION. STATISTICS MAY INCLUDE DATA THAT ARE RELATED TO AN EXCEPTIONAL EVENT. STATE AND NATIONAL STATISTICS MAY DIFFER FOR THE FOLLOWING REASONS: STATE STATISTICS ARE BASED ON CALIFORNIA APPROVED SAMPLERS, WHEREAS NATIONAL STATISTICS ARE BASED ON SAMPLERS USING FEDERAL REFERENCE OR EQUIVALENT METHODS. STATE AND NATIONAL STATISTICS MAY THEREFORE BE BASED ON DIFFERENT SAMPLERS. NATIONAL STATISTICS ARE BASED ON STANDARD CONDITIONS. STATE CRITERIA FOR ENSURING THAT DATA ARE SUFFICIENTLY COMPLETE FOR CALCULATING VALID ANNUAL AVERAGES ARE MORE STRINGENT THAN THE NATIONAL CRITERIA. ND=THERE WAS INSUFFICIENT (OR NO) DATA AVAILABLE TO DETERMINE THE VALUE.

SOURCES: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR IADAM) AIR POLLUTION SUMMARIES

Monterey County Air Quality Monitoring

The MBARD and the CARB maintain three air quality monitoring sites in Monterey County that collect data for ozone and $PM_{2.5}$. These include the Carmel Valley - Ford Road, King City - 415 Pearl

Street, and Salinas - #3 monitoring sites. The King City – 415 Pearl St. location also collects data for hourly standard PM_{10}. It is important to note that the federal ozone 1-hour standard was revoked by the EPA and is no longer applicable for federal standards. Data obtained from the monitoring sites between 2014 and 2016 (latest year of data available) is shown in Table 3.1-6, Table 3.1-7, and Table 3.1-8.

TABLE 3.1-6: AMBIENT AIR QUALITY MONITORING DATA (CARMEL VALLEY – FORD ROAD)

Pollutant	*Cal.* Primary Standard	*Fed.* Primary Standard	*Year*	*Max Concentration*	*Days Exceeded State/Fed Standard*
Ozone (O_3) (1-hour)	0.09 ppm for 1 hour	NA	2016 2015 2014	0.078 0.071 0.078	0 / N/A 0 / (N/A) 0 / (N/A)
Ozone (O_3) (8-hour)	0.07 ppm for 8 hour	0.075 ppm for 8 hour	2016 2015 2014	0.061 0.066 0.070	0 / 0 0 / 0 0 / 0
Fine Particulate Matter ($PM_{2.5}$)	No 24 hour State Standard	35 ug/m^3 for 24 hours	2016 2015 2014	(ND) (ND) (ND)	(ND) / 11.9 (ND) / 1 (ND) / 0

SOURCES: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR IADAM) AIR POLLUTION SUMMARIES.

TABLE 3.1-7: AMBIENT AIR QUALITY MONITORING DATA (KING CITY – 415 PEARL STREET)

Pollutant	*Cal.* Primary Standard	*Fed.* Primary Standard	*Year*	*Max Concentration*	*Days Exceeded State/Fed Standard*
Ozone (O_3) (1-hour)	0.09 ppm for 1 hour	NA	2016 2015 2014	0.075 0.079 0.076	0 / NA 0 / NA 0 / NA
Ozone (O_3) (8-hour)	0.07 ppm for 8 hour	0.075 ppm for 8 hour	2016 2015 2014	0.065 0.064 0.065	0 / 0 0 / 0 0 / 0
Particulate Matter (PM_{10})	50 ug/m3 for 24 hours	150 ug/m^3 for 24 hours	2016 2015 2014	(ND) (ND) (ND)	(ND) / 0 (ND) / 0 (ND) / 0
Fine Particulate Matter ($PM_{2.5}$)	No 24 hour State Standard	35 ug/m^3 for 24 hours	2016 2015 2014	(ND) (ND) (ND)	ND) / 0 (ND) / 0 (ND) / 0

SOURCES: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR IADAM) AIR POLLUTION SUMMARIES.

TABLE 3.1-8: AMBIENT AIR QUALITY MONITORING DATA (SALINAS - #3)

Pollutant	*Cal.* Primary Standard	*Fed.* Primary Standard	*Year*	*Max Concentration*	*Days Exceeded State/Fed Standard*
Ozone (O_3) (1-hour)	0.09 ppm for 1 hour	NA	2016 2015 2014	0.066 0.068 0.066	0 / NA 0 / NA 0 / NA
Ozone (O_3) (8-hour)	0.07 ppm for 8 hour	0.075 ppm for 8 hour	2016 2015 2014	0.058 0.061 0.062	0 / 0 0 / 0 0 / 0
Fine Particulate Matter ($PM_{2.5}$)	No 24 hour State Standard	35 ug/m^3 for 24 hours	2016 2015 2014	(ND) (ND) (ND)	(N/A) / 0 (N/A) / 0 (N/A) / 0

SOURCES: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR IADAM) AIR POLLUTION SUMMARIES.

ODORS

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another.

It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air.

When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

SENSITIVE RECEPTORS

A sensitive receptor is a location where human populations, especially children, seniors, and sick persons, are present and where there is a reasonable expectation of continuous human exposure to pollutants. Examples of sensitive receptors include residences, hospitals and schools. The closest sensitive receptors to the Plan Area are located to the west of Village Center portion of the Plan Area, at the existing McKinnon School, and the residential subdivisions located to the south of the Plan Area (south of Boronda Road).

3.1.2 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort,

and it is composed of the following basic elements: NAAQS for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The EPA is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

The law recognizes the importance for each state to locally carry out the requirements of the FCAA, as special consideration of local industries, geography, housing patterns, etc. are needed to have full comprehension of the local pollution control problems. As a result, the EPA requires each state to develop a State Implementation Plan (SIP) that explains how each state will implement the FCAA within their jurisdiction. A SIP is a collection of rules and regulations that a particular state will implement to control air quality within their jurisdiction. CARB is the state agency that is responsible for preparing the California SIP.

Transportation Conformity

Transportation conformity requirements were added to the FCAA in the 1990 amendments, and the EPA adopted implementing regulations in 1997. See §176 of the FCAA (42 U.S.C. §7506) and 40 CFR Part 93, Subpart A. Transportation conformity serves much the same purpose as general conformity: it ensures that transportation plans, transportation improvement programs, and projects that are developed, funded, or approved by the United States Department of Transportation or that are recipients of funds under the Federal Transit Act or from the Federal Highway Administration (FHWA), conform to the SIP as approved or promulgated by EPA.

Currently, transportation conformity applies in nonattainment areas and maintenance areas. Under transportation conformity, a determination of conformity with the applicable SIP must be made by the agency responsible for the project, such as the Metropolitan Planning Organization, the Council of Governments, or a federal agency. The agency making the determination is also responsible for all the requirements relating to public participation. Generally, a project will be considered in conformance if it is in the transportation improvement plan and the transportation improvement plan is incorporated in the SIP. If an action is covered under transportation conformity, it does not need to be separately evaluated under general conformity.

Transportation Control Measures

One particular aspect of the SIP development process is the consideration of potential control measures as a part of making progress towards clean air goals. While most SIP control measures are aimed at reducing emissions from stationary sources, some are typically also created to address mobile or transportation sources. These are known as transportation control measures (TCMs). TCM strategies are designed to reduce vehicle miles traveled and trips, or vehicle idling and associated air pollution. These goals are achieved by developing attractive and convenient alternatives to single-occupant vehicle use. Examples of TCMs include ridesharing programs, transportation

infrastructure improvements such as adding bicycle and carpool lanes, and expansion of public transit.

STATE

CARB Mobile-Source Regulation

The State of California is responsible for controlling emissions from the operation of motor vehicles in the state. Rather than mandating the use of specific technology or the reliance on a specific fuel, the CARB's motor vehicle standards specify the allowable grams of pollution per mile driven. In other words, the regulations focus on the reductions needed rather than on the manner in which they are achieved. Towards this end, the CARB has adopted regulations which required auto manufacturers to phase in less polluting vehicles.

California Clean Air Act

The California Clean Air Act (CCAA) was first signed into law in 1988. The CCAA provides a comprehensive framework for air quality planning and regulation, and spells out, in statute, the state's air quality goals, planning and regulatory strategies, and performance. CARB is the agency responsible for administering the CCAA. CARB established ambient air quality standards pursuant to the California Health and Safety Code (CH&SC) [§39606(b)], which are similar to the federal standards.

Air Quality Standards

NAAQS are determined by the EPA. The standards include both primary and secondary ambient air quality standards. Primary standards are established with a safety margin. Secondary standards are more stringent than primary standards and are intended to protect public health and welfare. States have the ability to set standards that are more stringent than the federal standards. As such, California established more stringent ambient air quality standards.

Federal and state ambient air quality standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulates (PM_{10}) and lead. In addition, California has created standards for pollutants that are not covered by federal standards. The state and federal primary standards for major pollutants are shown in Table 3.1-1.

Tanner Air Toxics Act

California regulates TACs primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for ARB to designate substances as TACs. This includes research, public participation, and scientific peer review before ARB can designate a substance as a TAC. To date, ARB has identified more than 21 TACs and has adopted EPA's list of HAPs as TACs. Most recently, diesel PM was added to the ARB list of TACs. Once a TAC is identified, ARB then adopts an Airborne Toxics Control Measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate BACT to minimize emissions.

The AB 2588 requires that existing facilities that emit toxic substances above a specified level prepare a toxic-emission inventory, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures. ARB has adopted diesel exhaust control measures and more stringent emission standards for various on-road mobile sources of emissions, including transit buses and off-road diesel equipment (e.g., tractors, generators). In February 2000, ARB adopted a new public-transit bus-fleet rule and emission standards for new urban buses. These rules and standards provide for (1) more stringent emission standards for some new urban bus engines, beginning with 2002 model year engines; (2) zero-emission bus demonstration and purchase requirements applicable to transit agencies; and (3) reporting requirements under which transit agencies must demonstrate compliance with the urban transit bus fleet rule.

LOCAL

Monterey Bay Air Resources District

The MBARD is the local agency with primary responsibility for compliance with both the federal and state standards and for ensuring that air quality conditions are maintained. They do this through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. There are three counties that make up the MBARD. They are: Santa Cruz, San Benito, and Monterey.

The mission of the MBARD is to "Protect Public and Environmental Health while balancing Economic and Air Quality Considerations".

The air district is responsible for air monitoring, permitting, enforcement, long-range air quality planning, regulatory development, education and public information activities related to air pollution, as required by the California Clean Air Act and Amendments (HSC Section 40910 et seq.) and the federal Clean Air Act and Amendments (42 U.S.C. Section 7401 et seq.).

California Health and Safety Code Sections 39002, et seq. and 40000, et seq. require local districts to be the primary enforcement mechanism for air pollution control. Districts must have rules and regulations for the implementation and enforcement for the attainment and maintenance of federal and state ambient air standards.

The MBARD has prepared the *2005 Particulate Matter Plan*, which fulfills the requirements of Senate Bill (SB) 656. SB 656 requires the CARB, in conjunction with local air pollution control districts, to adopt a list of the most readily available, feasible and cost-effective control measures that could be implemented by air pollution control districts to reduce ambient levels of particulate matter in their air basins.

The MBARD has also prepared the *2007 Federal Maintenance Plan for Maintaining the National Ozone Standard in the Monterey Bay Region*. This plan was prepared according to the U.S. E.P.A's "Maintenance Plan Guidance Document for Certain 8-hour Ozone Areas under 110(a) (1) of the Clean Air Act", dated May 20, 2005. This document includes an attainment inventory, a

demonstration of maintenance, a commitment to continue ambient air quality monitoring, a contingency plan, and verification of continued attainment.

The MBARD has also prepared the *Monterey Bay Unified Air Pollution Control District 2008 Air Quality Management Plan (2008 AQMP)*. The CCAA (Health & Safety Code §§ 40910 et seq.) required initial preparation of an Air Quality Management Plan (AQMP) in 1991, with subsequent updates every three years. This is the fifth update to the 1991 AQMP. There have been many changes both in terms of air quality and the regulatory setting since the initial AQMP in 1991. In particular, in 2006 the CARB revised the state AAQS and made it considerably more stringent by adding an 8-hour average to the standard, which previously only included a 1-hour average. Both components of the standard must now be met before the ARB can designate that an area has attained the standard. The *2008 AQMP* is a transitional plan, shifting focus from achieving the 1-hour component of the state AAQS to achieving the new 8-hour requirement.

In addition to the above listed plans, the MBARD has developed the *Triennial Plan Revision 2009-2011*. This report is an update to the elements included in the *2008 AQMP* based on a review of the time period 2009-2011 and shows that the region continues to make progress toward meeting the ozone standard.

City of Salinas General Plan

The General Plan includes a number of policies that directly or indirectly relate to air quality. For example, policies relating to compact growth have the effect of reducing vehicle miles travelled, and therefore reducing mobile source air emissions. The Salinas General Plan establishes the following policies directly or indirectly related to air quality emissions in the General Plan:

Conservation/Open Space Element

Policy COS-6.1: Cooperate with the Monterey Bay Unified Air Pollution Control District to implement the Air Quality Plan.

Policy COS-6.2: Implement measures to protect air quality that may be required to mitigate the effects of population growth.

Policy COS-6.3: Encourage development design that maintains air quality and reduces direct and indirect emissions of air contaminates.

Policy COS-6.4: Support alternative modes of transportation, such as walking, biking and public transit, and develop bike- and pedestrian-friendly neighborhoods to reduce emissions associated with automobile use.

Safety Element

Policy S-3.1: To reduce the risk posed by air pollution, work with responsible federal, state, and county agencies to decrease air pollution emissions occurring within the air basin.

Land Use Element

Policy LU-1.1: Achieve a balance of land uses to provide for a range of housing, jobs, libraries, and educational and recreational facilities that allow residents to

live, work, shop, learn, and play in the community.

Circulation Element

Policy C-1.9: Use traffic calming methods within residential areas where necessary to create a pedestrian-friendly circulation system.

Policy C-1.10: Encourage car-pooling, at government offices, business, schools, and other facilities, to reduce the number of vehicles using the roadway system.

Policy C-2.6: Promote a regional job-housing balance to reduce vehicle miles travelled and congestion on the regional circulation system.

Policy C-2.7: Support continued maintenance and expanded use of the City's Intermodal Transportation Center.

Policy C-3.2 Design development and reuse/revitalization projects to be transit-oriented to promote the use of alternative modes of transit and support higher levels of transit service.

Policy C-4.1: Continue to develop a network of on- and off-street bicycle routes to encourage and facilitate the use of bicycles for commute, recreational, and other trips. Eliminate gaps and provide connections between existing bicycle routes.

Policy C-4.4: Improve the biking environment by providing safe and attractive cut-throughs, bike lanes, and bike paths for both recreational and commuting purposes.

Policy C-5.1: Increase availability of safe and well-maintained sidewalks in all areas of the City.

Policy C-5.5 Improve the walking environment by providing safe and attractive sidewalks, cut-throughs, and walkways, for both recreational and commuting purposes.

3.1.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the WASP will have a significant impact on the environment associated with air quality if it will:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Cause a violation of any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);

- Expose sensitive receptors to substantial pollutant concentrations;
- Create objectionable odors affecting a substantial number of people.

CRITERIA POLLUTANT EMISSIONS CALCULATIONS

California Emission Estimator Model (CalEEMod)™ (v.2016.3.2), developed for the California Air Pollution Officers Association (CAPCOA) in collaboration with California air districts, was used to estimate emissions for the WASP. Given the size and complexity of the proposed project, it was assumed that full project buildout would not occur until 2035.

The land use assumptions for the modeling include: Single-Family Detached Housing – 1,361 dwelling units; Apartments Mid-Rise – 91 dwelling units; Condo/Townhouse – 2,888 dwelling units; General Office Building – 143,000 square feet; Regional Shopping Center – 371,000 square feet; Supermarket – 57,000 square feet; High School – 39.19 acres; Junior High School/Middle School – 20.78 acres; Elementary School – 30.98 acres; and City Park – 50 acres. These assumptions are consistent with those made in the Transportation Impact Analysis developed for the proposed project by Fehr & Peers (Fehr & Peers, 2018).

OPERATIONAL ACTIVITIES

Mobile-source based criteria pollutant emissions were estimated using the emission factors provided within CalEEMod; an estimate of proposed project-generated VMT developed as part of this analysis was provided by the traffic consultant, Fehr & Peers, as provided in Appendix G. Average trip lengths by trip type were modified in CalEEMod to ensure consistency with the average trip length as provided by Fehr & Peers. Criteria pollutant emissions from consumer products, landscape maintenance activities, and other sources of operational energy usage (e.g. electricity and natural gas) were estimated using the default emission factors provided in CalEEMod.

Operation emissions from all sources were estimated for both buildout of the Specific Plan, which is expected to occur by 2035, and for an interim period when 20 percent of the proposed land uses become operational, which could occur as early as 2019 (as a highly conservative estimate). This second scenario responds to the maximum potential project development of 20 percent of the overall project in a single year (another conservative assumption), and assumes that, as a worst-case scenario, this could occur in the first year of project development (also a conservative assumption). The interim year 2019 is examined because, for some pollutants such as NOx, emission factors from motor vehicles would be highest in 2019 as compared with later years, as NOx emissions are expected to decline over time through the period when full buildout under the Specific Plan takes place.

Maximum daily emissions were estimated for both peak summer day and peak winter day. The highest value for each criteria pollutant was used for the purposes of this analysis. The potential for Specific Plan-generated traffic to result in concentrations of CO that exceed NAAQS and state AAQS for this pollutant was evaluated using MBARD-recommended criteria. Health risks from project-generated, construction- and operation-related emissions of TACs were assessed qualitatively. This assessment is based on the location from which construction- or operation-related TAC emissions

would be generated by land uses developed under the Specific Plan relative to off-site sensitive receptors, as well as the duration during which TAC exposure would occur. Similarly, the assessment of odor-related impacts is based on the types of odor sources associated with the land uses that would be developed under the Specific Plan and their location relative to off-site receptors.

CONSTRUCTION ACTIVITIES

Construction activities would take place over the course of approximately 17 years, from 2019 to 2035. These construction activities can be described as site improvements (grading, underground infrastructure, and topside improvements) and vertical construction (building construction and architectural coatings).

Site Improvements: The construction of site improvements may be performed as one task, but may be broken into two or more separate phases. The exact construction schedule is largely dependent on the economic conditions of the region and the ability for the market to absorb the proposed residential and commercial buildings.

The site improvement phase of construction will begin with site preparation. This step will include the use of dozers, backhoes, and loaders to strip (clear and grub) all organic materials and the upper half-inch to inch of soil from the Plan Area. This task will include vehicle trips from construction workers.

After the site is striped of organic materials, grading would begin. This activity will involve the use of excavators, graders, dozers, scrappers, loaders, and backhoes to move soil around the Plan Area to create specific engineered grade elevations and soil compaction levels. Grading the Plan Area would include vehicle trips from construction workers.

The next step involves the installation of underground infrastructure. This step will involve the use of excavators to dig trenches, place pipe and conduit, bury pipe and conduit, and compact trench soil.

The last task is to install the topside improvements, which includes pouring concrete curbs, gutters, sidewalks, and access aprons and then paving of all streets and parking lots. This task will involve the use of pavers, paving equipment, and rollers and will take approximately three months and will include vehicle trips from construction workers.

Building Construction/Architectural Coatings: Building construction involves the vertical construction of structures and landscaping around the structures. This task will involve the use of forklifts, generator sets, welders and small tractors/loaders/backhoes. The exact construction schedule is largely dependent on the economic conditions of the region and the ability of the market to absorb the residential and commercial buildings. Architectural coatings involve the interior and exterior painting associated with the structures. This task generally begin after construction begins on the structure and will generally be completed for each building around the time of the completion of each building. Building construction and the application of architectural coatings will include vehicle trips from construction workers, and building construction will also include vehicle trips from vendors.

Mitigation: Air quality-related mitigation measures developed for the proposed project were developed using CalEEMod, with default emission factors generally as provided by CalEEMod. CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* guidance was utilized as a reference document, as necessary. See Appendix G for further detail.

The results from CalEEMod for operational and construction emissions are described under *Impacts and Mitigation Measures*, below.

IMPACTS AND MITIGATION MEASURES

Impact 3.1-1: The project has the potential to conflict with or obstruct implementation of the applicable air quality plan (Significant and Unavoidable)

In accordance with the California Clean Air Act, the MBARD developed the *2008 Air Quality Management Plan for the Monterey Bay Region* (*2008 AQMP*). The *2008 AQMP* is a transitional plan shifting focus of MBARD's efforts from achieving the 1-hour component of the ozone state AAQS to achieving the 8-hour ozone requirement. The plan includes an updated air quality trends analysis, which reflects both the 1-hour and 8-hour standards, as well as an updated emission inventory, which includes the latest information on stationary, area and mobile emission sources.

In April 2013, the MBARD adopted the *Triennial Plan Revision 2009-2011*, which assesses and updates elements of the *2008 AQMP*, including the air quality trends analysis, emission inventory, and mobile source programs. The *Triennial Plan Revision 2009-2011* only addresses attainment of the state ozone standard.

The *CEQA Air Quality Guidelines* (MBARD, 2008a) provides a list of feasible mitigation measures that would substantially reduce impacts on ozone levels by ensuring consistency with the applicable air quality plans. As is currently proposed, the WASP is expected to be built out under a staged approach, and all mitigation would be applicable to each phase. Nevertheless, as provided under the following impact discussion (see Impact 3.1-2), operational activities within the Plan Area would exceed air district thresholds for some criteria pollutants. Even with the mitigation measures provided under Impact 3.1-2, operational emissions levels for ozone precursors (ROG and NOx) and PM_{10} would remain above the defined thresholds of significance. As such, operation of the WASP would have a ***significant and unavoidable*** impact. The proposed project is required to implement the following mitigation measure.

MITIGATION MEASURES

Mitigation Measure 3.1-1: *The proposed project shall incorporate one or more of the following actions, as described within the MBARD's CEQA Air Quality Guidelines:*

- *Phase development of residences so that population growth from the project is consistent with projections for forecast years in the AQMP.*
- *Ensure that the jurisdiction's population forecasts are updated in the next AQMP by working with AMBAG or the appropriate local agency.*

- *Reduce number of residences to ensure growth is consistent with the AQMP.*
- *Implement sufficient transportation control measures to fully offset any increase in emissions related to future population in excess of AQMP forecasts.*

Impact 3.1-2: Project operation has the potential to cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation (Significant and Unavoidable)

The WASP would be a direct and indirect source of air pollution, in that it would generate and attract vehicle trips in the region (mobile source emissions) and it would increase area source emissions and energy consumption. The mobile source emissions would be entirely from vehicles, while the area source emissions would be primarily from the use of natural gas fuel combustion, landscape fuel combustion, consumer products, and architectural coatings.

The MBARD's *CEQA Air Quality Guidelines* (MBARD, 2008a) provides a list of applicable construction and operation air quality emissions thresholds, as well as a list of mitigation measures to incorporate in circumstances where emissions are above applicable thresholds. Additionally, The *2008 AQMP* and the *Triennial Plan Revision 2009-2011* provide guidance on how the AAQS for ozone would be met.

CalEEMod was used to model operational emissions upon full buildout of the Plan Area. Table 3.1-9 shows proposed project buildout emissions as provided by CalEEMod, which include mobile, area source, and energy emissions of criteria pollutants that would result from operations of the WASP under the provided assumptions. It should be noted that the values below represent the largest daily level of operational emissions expected from the proposed project. Table 3.1-10 provides operational project emissions under the conservative scenario of 20% buildout of the Plan Area occurring by 2019, after a single year of construction activity. It should be noted that individual category emissions may not equal total emissions due to rounding. Additionally, it should be noted that, given the complexity of calculating the aggregate effect of mitigation on the proposed project's criteria pollutant emissions, the mitigated values presented in Table 3.1-9 and Table 3.1-10 do not provide the total effect of mitigation on the proposed project, and therefore represent a conservative estimate of mitigated emissions.

TABLE 3.1-9: OPERATIONAL PROJECT GENERATED EMISSIONS AT FULL BUILDOUT

	ROG		***NOx***		***PM_{10}***		***SOx***	
Threshold	**≤ 137 lbs/day**		**≤ 137 lbs/day**		**≤ 82 lbs/day**		**≤ 150 lbs/day**	
Category	Unmitigated	Mitigated	Unmitigated	Mitigated	Unmitigated	Mitigated	Unmitigated	Mitigated
Area	1,170.9	246.4	31.5	25.3	168.4	3.7	2.3	0.2
Energy	5.1	5.1	44.7	44.7	3.5	3.5	0.3	0.3
Mobile	61.1	58.6	296.7	285.2	203.9	174.3	2.1	1.8
Total	**1,237.2**	**310.1**	**372.9**	**355.2**	**375.8**	**181.5**	**4.7**	**2.3**
Threshold Exceeded?	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**No**	**No**

SOURCES: CALEEMOD (V.2016.3.2)

TABLE 3.1-10: OPERATIONAL PROJECT GENERATED EMISSIONS (YEAR 2019 WITH 20% OF BUILDOUT)

	ROG		*NOx*		*PM_{10}*		*SOx*	
Threshold	**≤ 137 lbs/day**		**≤ 137 lbs/day**		**≤ 82 lbs/day**		**≤ 150 lbs/day**	
Category	Unmitigated	Mitigated	Unmitigated	Mitigated	Unmitigated	Mitigated	Unmitigated	Mitigated
Area	234.3	49.4	6.3	5.1	33.7	0.74	0.5	<0.1
Energy	1.0	1.0	8.9	8.9	0.7	0.7	0.1	0.01
Mobile	31.8	30.5	112.6	104.2	41.6	35.6	0.6	0.5
Total	**267.0**	**80.9**	**127.9**	**118.3**	**76.0**	**37.1**	**1.1**	**0.6**
Threshold Exceeded?	**Yes**	**Yes**	**No**	**No**	**No**	**No**	**No**	**No**

SOURCES: CALEEMOD (V.2016.3.2)

The MBARD, in their *CEQA Air Quality Guidelines* (MBARD, 2008a), has established operations-related emissions thresholds of significance as follows: 137 pounds per day of oxides of nitrogen (NOx), 137 pounds per day of reactive organic gases (ROG), 82 pounds per day of particulate matter of 10 microns or less in size (PM_{10}), and 150 pounds per day of SOx. There is no established threshold for $PM_{2.5}$ other then the PM_{10} threshold. A discussion of the impact of CO is provided under Impact 3.1-3. If the WASP's emissions will exceed the MBARD's thresholds of significance for operational-generated emissions, the WASP will have a significant impact on air quality and all feasible mitigation are required to be implemented to reduce emissions to the extent feasible.

As shown in Table 3.1-9 above, daily emissions of ROG, NOx, and PM_{10} at full buildout would exceed the MBARD thresholds of significance during full buildout of the WASP. The main sources of pollution can be attributed to area source emissions for ROG, mobile source emissions for NOx, and area source and mobile source emissions for PM_{10}. Fugitive dust is the primary cause of the PM_{10} exceedance. Additionally, as shown in Table 3.1-10, daily emissions of ROG at 20% of Plan Area buildout would exceed the MBARD thresholds of significance, although the MBARD emission thresholds for the other criteria pollutants would not be exceeded.

The development of the Plan Area would include a variety of features that would limit criteria pollutant emissions. For example, bus transit access to the Plan Area would be such that anyone within the Plan Area would be within approximately ½ mile (i.e. walking distance) of a bus station. Monterey-Salinas Transit currently provides bus service provided along Boronda Road, adjacent to the Plan Area, and may provide transit service within the interior of the Plan Area in the future, as funding becomes available. Public sidewalks would be adjacent to all proposed public streets, and there would be pavement and striping for bike lanes and/or paths within portions of the Plan Area. In addition, a variety of pedestrian connections would be provided; the proposed parks would provide additional walking paths between various portions of the Plan Area, as well as to adjacent off-site areas. Further, a variety of traffic calming measures would be included in the Plan Area (e.g. speed bumps and/or traffic circles). Overall, given that the Plan Area is designed in accordance with New Urbanism principles, non-automobile transportation choices are accorded a high priority in the development of the Plan Area.

Nevertheless, as shown in Table 3.1-9 and Table 3.1-10, the Plan Area would exceed some of the MBARD's operational criteria pollutant emissions thresholds. Therefore, mitigation measures are provided below to reduce emissions to the maximum extent feasible.

As shown in Table 3.1-9, upon full buildout, the WASP would exceed the MBARD thresholds of significance for operations for ROG, NO_x, and PM_{10}, even after mitigation. As such, operation of the WASP would have a ***significant and unavoidable*** impact relative to operational air emissions. The proposed project is required to implement the following mitigation measures.

MITIGATION MEASURES

Mitigation Measure 3.1-2*: Prior to the approval of improvement plans, the project proponent shall incorporate the following features into project plans and specifications, as directed by the City of Salinas and the MBARD:*

- *Provide traffic calming measures (for a minimum of 50% of streets and intersections within the Plan Area);*
- *Provide preferential carpool/vanpool parking spaces for a minimum of 5% of the total parking spaces;*
- *Ensure that a school bus is available throughout the Plan Area;*
- *Require low-VOC cleaning supplies to be used by businesses and cleaning services within the Plan Area;*
- *Require the use of low-VOC paint for all Plan Area architectural coatings (<100 g/L for residential <150 g/L for non-residential).*

Mitigation Measure 3.1-3: *Prior to the approval of improvement plans, the project proponent shall consider effective ways to encourage the use of cleaner burning alternative vehicles within the Plan Area, including by encouraging and/or incentivizing the installation of alternative fuel (e.g. natural gas; electric) charging stations at locations spaced throughout the Plan area. For example, this can be achieved by providing preferential parking for alternatively-powered vehicles, including electric cars, natural gas vehicles, and hydrogen fuel cell vehicles. This can also be achieved by providing charging stations for electric vehicles. The project proponent shall consider requiring the installation of alternative fuel charging stations within the Plan Area, to serve as a local hub for alternative vehicle refueling.*

Mitigation Measure 3.1-4*: Prior to the approval of improvement plans, the project proponent shall consider effective ways to encourage the use of alternative energy for the residential and commercial developments, including by implementing alternative energy (e.g. PV solar) building requirements, prior to the issuance of building permits. Additionally, prior to occupancy of the Plan Area, the project proponent shall coordinate with the MBARD to ensure that all feasible on-site renewable energy mitigation (including pre-installed electrical hookups) is incorporated into project plans and specifications.*

Mitigation Measure 3.1-5: *Prior to the approval of improvement plans, the project proponent shall require the use of low-flow (high-efficiency) indoor water fixtures, including for bathroom and kitchen faucets, toilet fixtures, and showers, in compliance with or better than the standards required within the 2016 California Green Building Standards Code.*

Mitigation Measure 3.1-6*: Prior to the approval of improvement plans, the project applicant shall require the use of water-efficient irrigation systems throughout the Plan Area (i.e. through the use of timers and/or water sensors).*

Mitigation Measure 3.1-7*: Prior to occupancy, the project proponent shall coordinate with the MBARD to ensure that all feasible pedestrian/bicycle facilities are provided within the Plan Area. Additionally, the project proponent shall consider offering free, shared, or discount rental bicycles at locations within the Plan Area. The project proponent shall also consider providing covered bicycling parking near the entrance to commercial establishments within the Plan Area.*

Mitigation Measure 3.1-8*: Prior to approval of improvement plans, the project proponent shall coordinate with the City of Salinas and the MBARD to establish an off-site mitigation program, coordinated by the MBARD. The program shall be designed to reduce criteria pollutant emissions to the extent feasible. Examples include, but are not limited to, retrofitting, repowering, or replacing heavy-duty engines from mobile sources (e.g. buses, construction equipment); or other programs the project proponent may proposed to reduce emissions.*

Mitigation Measure 3.1-9*: Prior to approval of improvement plans, the project proponent shall consider incorporation of one or more of the following additional Plan Area requirements, which shall be incorporated as feasible:*

- *Provide for a shuttle/mini-bus service for Plan Area employees;*
- *Require the development of bicycle storage/parking facilities;*
- *Require the installation shower/locker facilities for cyclists within the commercial portions of the Plan Area;*
- *Provide on-site child care centers within the commercial portions of the Plan Area;*
- *Incorporate park-and-ride lots.*

Impact 3.1-3: Project construction has the potential to cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation (Less than Significant with Mitigation)

Emissions from construction activities represent temporary impacts that are typically short in duration, depending on the size, phasing, and type of project. Air quality impacts can nevertheless be acute during construction periods, resulting in significant localized impacts to air quality. Construction-related activities would result in project-generated emissions of PM_{10} from site preparation, grading, installation of underground utilities, grading, and building construction. Fugitive dust emissions are associated primarily with site preparation and vary as a function of soil silt content, soil moisture, wind speed, and area of disturbance. Ozone precursor emissions of ROG and NOx are associated primarily with exhaust from construction equipment, haul truck trips, and worker trips. ROG emissions are also generated during asphalt paving and application of architectural coatings.

The air basin is in non-attainment for the state ambient air quality standard for PM_{10}. Based on analysis conducted by the air district, projects that include earthmoving activities on over 2.2 acres

per or general construction activities on over 8.1 acres per day are correlated with the emission of greater than the air district's threshold of 82 pounds of particulate matter per day. It is possible that future individual projects proposed within the Plan Area could involve grading that exceeds 2.2 acres per day. Therefore, fugitive dust from construction could exceed particulate matter emissions standards, and result in a significant impact.

According the *CEQA Air Quality Guidelines* (MBARD, 2008a), construction activities that directly generate 82 pounds per day or more of PM_{10} would have a significant impact on local air quality when they are located nearby and upwind of sensitive receptors. The proposed Plan Area would be located adjacent to existing potential residential sensitive receptors (e.g. to the south of Boronda Road and east of San Juan Grade Road). It should be noted that construction projects using typical construction equipment such as dump trucks, scrappers, bulldozers, compactors and front-end loaders that temporarily emit precursors of ozone (ROG and NO_x), are accommodated in the emission inventories of state- and federally-required air plans and would not have a significant impact on the attainment and maintenance of ozone AAQS. Therefore, only the MBARD construction air emissions threshold for PM_{10} is applicable for the purposes of this analysis.

According MBARD's *CEQA Air Quality Guidelines*, if a project were to exceed the 82 pounds per day threshold for PM_{10}, there are several feasible mitigation measures that address the many sources of PM_{10} during the construction phase of a project (e.g., grading, wind erosion, entrained dust). Common measures include watering, chemical stabilization, or reducing surface wind speeds with windbreaks. These measures are provided in more detail, below.

CalEEMod (v.2016.3.2) was used to estimate construction emissions for the WASP. Construction of the land uses proposed under the WASP would occur over an approximately 17-year period, with construction expected to start as early as 2019, continuing through 2035, with buildout occurring by approximately 2035. Construction activities would be market-driven, and is therefore expected to wax and wane over the course of the expected 17-year buildout timeframe. Table 3.1-11, below, provides the unmitigated and mitigated construction PM_{10} emissions, as modelled within CalEEMod (v.2016.3.2).

TABLE 3.1-11: PM_{10} CONSTRUCTION EMISSIONS

	Unmitigated	*Mitigated*
MBARD Threshold	**≤ 82 lbs/day**	**≤ 82 lbs/day**
Maximum Daily	20.6	10.7
Threshold Exceeded?	**Yes**	**No**

SOURCES: CALEEMOD (V.2016.3.2)

As shown in Tables 3.1-11, the WASP's maximum daily unmitigated emissions during construction of the Plan Area buildout in a single year is not expected to exceed the MBARD's threshold of significance (82 pounds per day) for construction-generated PM_{10}. Nevertheless, out of an abundance of caution, MBARD recommends the implementation of the following mitigation measures.

Compliance with pre-existing requisite federal, state, MBARD, and other local regulations and requirements, and with implementation of the mitigation measures provided by the MBARD for construction-related PM_{10} emissions, the proposed project would not cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation, with respect to the construction of the proposed project. This is a ***less than significant*** impact.

MITIGATION MEASURES

Mitigation Measure 3.1-10*: Prior to the issuance of grading permits, the project applicant shall prepare a grading plan subject to review and approval by the City. In the event that ground-disturbance exceeds 2.2 acres per day for initial site preparation activities that involve extensive earth-moving activities (e.g. grubbing, excavation, rough grading), and 8.1 acres per day for activities that involve minimal earth-moving (e.g. finish grading), the required grading plans shall include the following measures to be implemented as needed to prevent visible dust emissions:*

- *Water all active construction sites to prevent visible dust emissions. Frequency should be based on the type of operation, soil, and wind exposure;*
- *Prohibit grading activities during periods of high wind (over 15 mph);*
- *Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days);*
- *Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed area;*
- *Maintain at least 1'-0" of freeboard in haul trucks;*
- *Plant tree windbreaks or construct windbreaks on the windward perimeter of construction projects if adjacent to open land;*
- *Cover inactive storage piles;*
- *Sweep streets if visible soil material is carried out from the construction site; and/or*
- *Post a publicly visible sign written in English and Spanish which specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Unified Air Pollution Control District shall be visible to ensure compliance with Rule 402 (Nuisance).*

Impact 3.1-4: The proposed project has the potential to have carbon monoxide hotspot impacts (Less than Significant)

The Plan Area is located in a State attainment area and a federal attainment-unclassified area for carbon monoxide. However, proposed project traffic would increase concentrations of carbon monoxide along streets and intersections that provide access to the Plan Area. Carbon monoxide is a local pollutant (i.e., high concentrations are normally only found very near sources), and can form local elevated concentrations under specific conditions. The major source of carbon monoxide, a colorless, odorless, poisonous gas, is automobile traffic. Elevated concentrations (i.e. hotspots), therefore, are usually only found near areas of high traffic volume and congestion. Nevertheless, given the limited volume of traffic along nearby affected roadways, intersections, and highway off-ramps (see Section 3.10: Transportation and Circulation for further detail), and given existing environmental conditions, it is highly unlikely that the proposed project would generate a carbon

monoxide hotspot of concern (as per phone and email conversations with MBARD Air Quality Planners Alan Romero and David Frisbey on 1/27/2017) (MBARD, 2017).

Several factors combine to make substantial concentrations of carbon monoxide unlikely. Existing physical constraints such as high-density, high-profile buildings or other obstructions that could prevent dispersion of carbon monoxide are largely absent. Predominant weather conditions in the area include air movement that would help facilitate carbon monoxide dispersion. Congested traffic conditions that otherwise could result in concentration of carbon monoxide would be of short duration. Further, under existing regulatory and legislative mandates, emissions volumes from all vehicles classes will continue to decline. Given these factors, substantial concentrations of carbon monoxide are not expected at or along any affected roadways or intersections.

The MBARD is updating their *CEQA Air Quality Guidelines*. Therefore, the MBARD has recommended that the guidance provided in Section 3.1 of the most recent Caltrans' *SER Air Quality Conformity Analysis Annotated Outline* should be used for analysis of this potential impact for the proposed project (MBARD, 2017). Section 3.1 of the *SER Air Quality Conformity Analysis Annotated Outline* advises that, if a project is located in an area that is designated attainment-unclassified for CO, no project-level conformity analysis is necessary for CO (Caltrans, 2014).

This project is located in an area that is designated attainment-unclassified for carbon monoxide. Therefore, no project-level conformity analysis is necessary for CO. Substantial concentrations of carbon monoxide are not expected at or along any streets or intersections affected by the development of the Plan Area. This is a ***less than significant*** impact and no additional mitigation is required.

Impact 3.1-5: The proposed project has the potential for public exposure to toxic air contaminants (Less than Significant with Mitigation)

A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air. However, their high toxicity or health risk may pose a threat to public health even at very low concentrations. In general, for those TACs that may cause cancer, there is no concentration that does not present some risk. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined and for which the state and federal governments have set ambient air quality standards.

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the U.S. Environmental Protection Agency (EPA) regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007) and identified a group of 93 compounds emitted from mobile sources. In addition, EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 1999 National Air Toxics Assessment. These are acrolein, benzene, 1,3-butidiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), formaldehyde,

naphthalene, and polycyclic organic matter.

The 2007 EPA rule requires controls that will dramatically decrease Mobile Source Air Toxics (MSAT) emissions through cleaner fuels and cleaner engines. According to an FHWA analysis using EPA's MOBILE6.2 model, even if vehicle activity (VMT) increases by 145 percent, a combined reduction of 72 percent in the total annual emission rate for the priority MSAT is projected from 1999 to 2050. California maintains stricter standards for clean fuels and emissions compared to the national standards, therefore it is expected that MSAT trends in California will decrease consistent with or more than the U.S. EPA's national projections.

The CARB published the *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) to provide information to local planners and decision-makers about land use compatibility issues associated with emissions from industrial, commercial and mobile sources of air pollution. The CARB Handbook indicates that mobile sources continue to be the largest overall contributors to the State's air pollution problems, representing the greatest air pollution health risk to most Californians. The most serious pollutants on a statewide basis include diesel exhaust particulate matter (diesel PM), benzene, and 1,3-butadiene, all of which are emitted by motor vehicles. These mobile source air toxics are largely associated with freeways and high traffic roads. Non-mobile source air toxics are largely associated with industrial and commercial uses. Table 3.1-12 provides the California Air Resources Board minimum separation recommendations on siting sensitive land uses.

TABLE 3.1-12: CARB MINIMUM SEPARATION RECOMMENDATIONS ON SITING SENSITIVE LAND USES

Source Category	*Advisory Recommendations*
Freeways and High-Traffic Roads	• Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.[1]
Distribution Centers	• Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). • Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	• Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. • Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	• Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the CARB on the status of pending analyses of health risks.
Refineries	• Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	• Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloro-ethylene	• Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. • Do not site new sensitive land uses in the same building with perc dry cleaning operations.
Gasoline Dispensing Facilities	• Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

SOURCES: AIR QUALITY AND LAND USE HANDBOOK: A COMMUNITY HEALTH PERSPECTIVE" (CARB 2005)

The Plan Area is not located adjacent to a rail yard, port, refinery, chrome plater, dry cleaner, or gasoline dispensing facility. The closest gasoline dispensing facility (the Shell-Harden Ranch Gas Station, 1764 N. Main St.) is located approximately 0.13 miles to the southwest of the Plan Area, at its closest point. The closest dry cleaner (Harden Ranch Dry Cleaners) is located approximately 0.44 miles southwest of the Plan area, at its closest point.

The Plan Area is also located approximately 0.5 miles from Highway 101. Air toxics are considered a concern along this highway because it is a major transportation corridor for large diesel trucks that are known to emit diesel particulates. However, given the distance from the Plan Area, there are no sensitive land uses proposed within the Plan Area that would be significantly affected by this highway.

There are sensitive residential land uses located to the south, west, and north of the Plan Area. Additionally, Mckinnon School, which is currently located within the Plan Area and would remain after buildout of the proposed project, is located towards the southern portion of the Plan Area. There is the potential that sensitive land uses could potentially be affected by the commercial uses within the Plan Area and/or by the potential increase in diesel trucks travel to and from commercial uses within the Plan Area.

The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly) requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels. The Air Toxics "Hot Spots" Act requires air districts to prioritize facilities to determine which facilities must perform a health risk assessment. These facilities, for purposes of risk assessment, are ranked into high, intermediate, and low priority categories. Each air district is responsible for establishing the prioritization score threshold at which facilities are required to prepare a health risk assessment. In establishing priorities, the air districts are to consider the potency, toxicity, quantity, and volume of hazardous materials released from the facility, the proximity of the facility to potential receptors, and any other factors that the air district determines may indicate that the facility may pose a significant risk.

In order to assist the air districts with this prioritization requirement, CAPCOA Toxics Committee, in cooperation with the Office of Environmental Health Hazard Assessment and the California Air Resources Board, developed the Air Toxics "Hot Spots" Program, Facility Prioritization Guidelines (July 1990). The purpose of the guideline is to provide air districts with suggested procedures for prioritizing facilities. However, districts may develop and use prioritization methods which differ from the CAPCOA guidelines.

The MBARD prioritizes facilities based on the quantity and toxicity of the emissions, and their proximity to areas where the public may be exposed. Facilities put in the significant risk category are required by the MBARD to prepare a comprehensive, facility-wide health risk assessment. However, the proposed project is a Plan-level document and does not include facility-specific detail that would enable the analysis of the quantity and toxicity of emissions, if any. It is noted, however, that the closest sensitive receptors are located to the west of Village Center portion of the Plan Area, at the

existing McKinnon School, and the residential subdivisions located to the south of the Plan Area. Nevertheless, given that the commercial uses within the Plan area (located within the proposed Village Center) would be made up of mixed use commercial uses, including a grocery store and a complement of shops, restaurants, residential units, offices, retail, and professional services, it is unlikely significant generation of toxic emissions would occur. Still, until an actual user/business/facility is proposed within the Plan Area, quantity and toxicity of emissions cannot be assessed with any level of certainty.

It should also be noted that there is a lime quarry located approximately 1.2 miles from the northeast edge of the WASP, at its closest point. According to the MBARD, this mine is located a distance far enough away from the new receptors generated within the Plan Area that risk of toxics from the mine to the Plan area is not of major significance (as per a phone conversation with MBARD Planner David Craft on 2/29/2016) (MBARD, 2016b).

Overall, while implementation of the West Area Specific Plan, in and of itself, would not result in an increased exposure of sensitive receptors to localized concentrations of TACs, there is a potential for future commercial business activity, as permitted under the West Area Specific Plan, to result in increased exposure of sensitive receptors to localized concentrations of TACs. The emission sources could be stationary sources and/or mobile source (i.e. diesel truck traffic). The following mitigation measure would ensure that each future business is assessed for TACs in accordance with the requirements of the Air Toxics "Hot Spots" Program, Facility Prioritization Guidelines (July 1990) Implementation of this measure would ensure that the impact is ***less than significant***.

MITIGATION MEASURES

Mitigation Measure 3.1-11: *Prior to the construction and/or operation of any commercial building that would emit toxic air contaminants, the project proponent shall, at a minimum, perform prioritization screening in accordance with the Air Toxics "Hot Spots" Program, Facility Prioritization Guidelines (July 1990) and the Air Toxics "Hot Spots" Information and Assessment Act. The prioritization screening shall be performed in coordination with the Monterey Bay Air Resources District, whom will be responsible for determining which facilities based on their prioritization screening score, must perform a health risk assessment. In determining the need to prepare a health risk assessment, the Monterey Bay Air Resources District should consider the potency, toxicity, quantity, and volume of hazardous materials released from the facility, the proximity of the facility to potential receptors, and any other factors specific to the facility that indicate that it may pose a significant health risk.*

If a health risk assessment is warranted for a facility based on its prioritization score, the project applicant shall assess the facilities for the potential to expose the public to toxic air contaminants in excess of the applicable thresholds. Facilities that exceed the applicable thresholds have the potential to expose the public to toxic air contaminants levels that would be considered significant. Mitigation is required for such facilities to ensure that the toxic air contaminants are reduced to levels below the threshold.

Impact 3.1-6: The proposed project has the potential for exposure to odors (Less than Significant with Mitigation)

While offensive odors rarely cause any physical harm, they can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and the MBARD. The general nuisance rule (California Health and Safety Code §41700) and air district Rule 402 is the basis for the threshold.

Examples of facilities that are known producers of odors include: Wastewater Treatment Facilities, Chemical Manufacturing, Sanitary Landfill, Fiberglass Manufacturing, Transfer Station, Painting/Coating Operations (e.g. auto body shops), Composting Facility, Food Processing Facility, Petroleum Refinery, Feed Lot/Dairy, Asphalt Batch Plant, and Rendering Plant.

If a project would locate receptors and known odor sources in proximity to each other further analysis may be warranted; however, if a project would not locate receptors and known odor sources in proximity to each other, then further analysis is not warranted. The WASP does not propose sensitive receptors that could be exposed to odors in the vicinity, nor does it propose uses that would create odors that could expose receptors in the area. Air district Rule 402 prohibits any mobile or stationary source generating an objectionable odor, with the exception of odors emanating from certain agricultural operations. The California Health and Safety Code §41700 and air district rule 402 prohibit emissions of air contaminants from any source that cause nuisance or annoyance to a considerable number of people or that present a threat to public health or cause property damage. Compliance with these rules would preclude land uses proposed under the proposed project from emitting objectionable odors. Therefore, operation of the proposed project would not result in significant objectionable odors.

However, it is possible that construction activities would have the potential to cause exposure to odors. Implementation of the following mitigation measure would reduce the risk that construction activities generate odors sufficient to cause a nuisance to nearby receptors. Therefore, with implementation of the following mitigation measure, implementation of the WASP would have a ***less than significant*** impact relative to this topic.

Mitigation Measure 3.1-12: *If a project would emit pollutants associated with odors in substantial amounts (i.e. during project construction activities), the analysis should assess the impact on existing or reasonably foreseeable sensitive receptors. The American Society of Testing Materials has developed procedures to assess odor impacts (Standard Methods E679 and E1432). These methods establish a sensory threshold of detection or recognition of odors that is derived from the best-estimate value of a representative sample group. Once a sensory threshold is established, it should be compared to average or typical concentrations of odor-causing pollutants at existing or reasonably foreseeable sensitive receptors. A protocol for assessing odor impacts should be determined with the air district.*

Impact 3.1-7: Cumulative impact on the region's air quality (Cumulatively Considerable and Significant and Unavoidable)

Under buildout conditions in the Monterey County, the NCCAB would continue to experience increases in criteria pollutants and efforts to improve air quality throughout the basin would be hindered. Unfortunately, much of the increase in criteria pollutants in Monterey County are out of the control of the communities within Monterey County, since criteria pollutants generated in other air basins flow into the County and the NCCAB (including from the San Francisco Bay Area and SFFAB). As described in previously in this Section, Monterey County has a state designation of nonattainment for ozone and PM_{10}, and is either unclassified or attainment for all other criteria pollutants. Table 3.1-2 in this section presents the state and federal attainment status for Monterey County.

As discussed under Impact 3.1-2, operation of the WASP would result in increased emissions primarily from vehicle miles travelled associated with project implementation and area sources. The MBARD has established operations-related emissions thresholds of significance and it was determined that the Specific Plan's annual emissions of ROG, NOx, and PM_{10} at full buildout would exceed the MBARD's thresholds of significance for these pollutants, even with mitigation.

The main source of pollution can be contributed to mobile source emissions for ROG, NOx, and PM_{10}. Area source emissions for ROG are also a major source of pollution causing the exceedance.

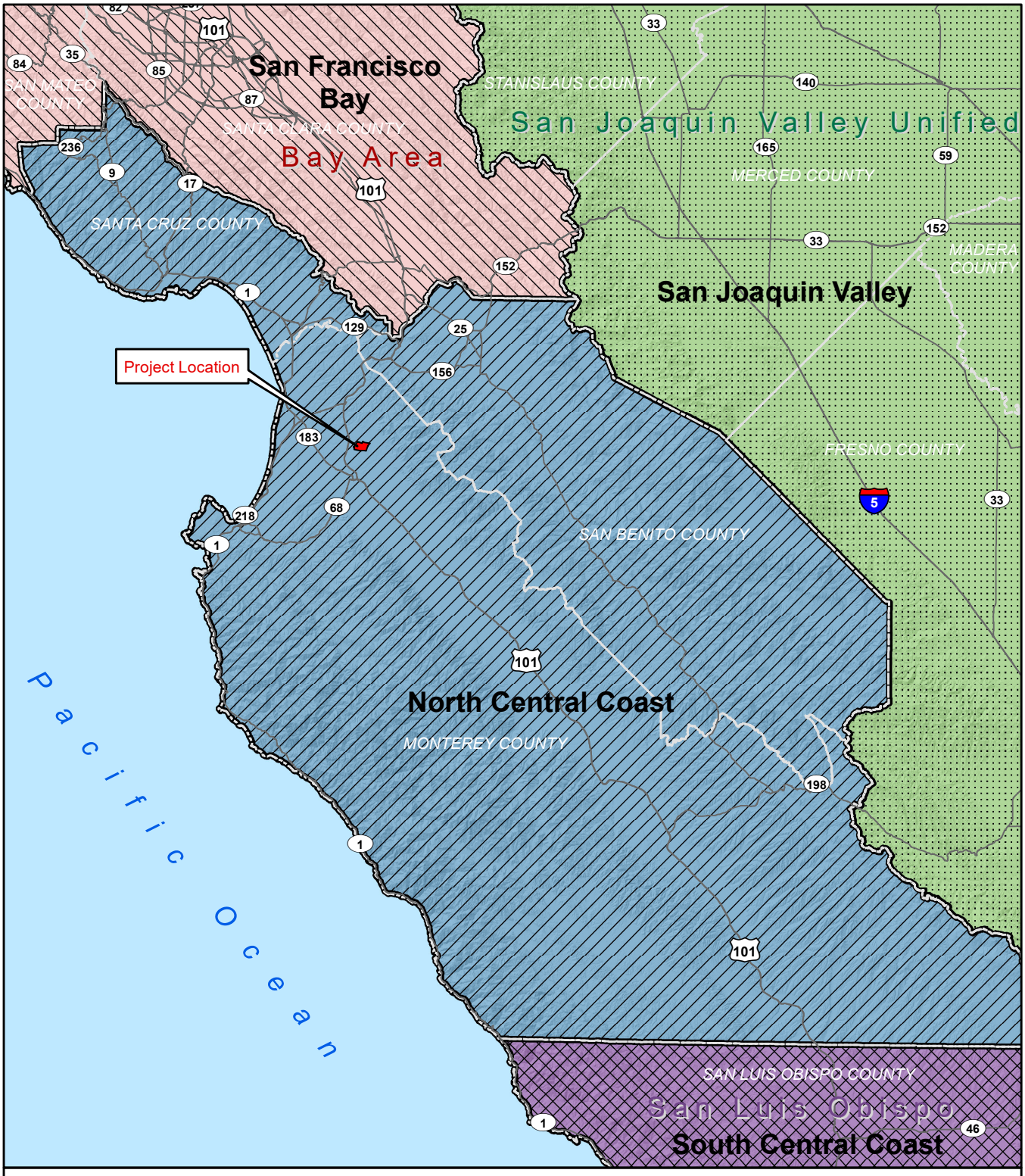
There are limited mitigation inputs available within the California Emission Estimator Model (CalEEMod)™ (v.2016.3.2) to quantify emission reductions for large-scale "plans". As shown in Tables 3.1-9 and 3.1-10, even with mitigation incorporated into the model, the WASP would exceed several of the MBARD's thresholds of significance for operations.

The MBARD's *CEQA Air Quality Guidelines* provides a list of mitigation measures that would help the proposed project comply with the MBARD's *2008 AQMP* and the *Triennial Plan Revision 2009-2011*. As is currently proposed, the WASP is expected to be built out under a staged approach, and all mitigation would be applicable to each phase. However, even with the application of these and other mitigation measures, operational emissions levels would remain above the defined thresholds of significance. As such, implementation of the WASP would have a ***cumulatively considerable contribution*** and ***significant and unavoidable*** impact on the region's air quality.

MITIGATION MEASURES

Implement Mitigation Measures 3.1-1 through 3.1-12.

This page left intentionally blank.



CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.1-1: Map of Air Basins And Districts

Sources: California Environmental Protection Agencey Air Resources Board; CalAtlas. Map date: February 24, 2016.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.

This section describes the regulatory setting, regional biological resources, and impacts that are likely to result from project implementation. The analysis contained in this section is intended to be at a project-level, and covers impacts associated with the conversion of the entire site to an urban use. This section is based in part on the following documents, reports and studies: *City of Salinas General Plan* (City of Salinas, 2002), *Final Environmental Impact Report, Salinas General Plan* (City of Salinas, 2002), *Salinas Annexation Project, Salinas, California – Existing Biological Resources Report* (Biotic Resources Group, 2005), and *Web Soil Survey* (NRCS, 2015).

Methods

PREVIOUS INVESTIGATIONS

Field surveys and habitat evaluations were performed in 2004 by Biotic Resources Group: March (26th and 31st), April (14th and 30th), May (17th), June (17th), July (26th). These field investigations were performed in the study area to establish the existing conditions. This included identification of the habitat types, hydrologic features, topography, soil characteristics, vegetation. Field investigations were performed during the floristic period for species in the region. Field investigations also inspected for the presence, or potential for presence of wildlife. The area was inspected for its upland and aquatic habitat functions. The field investigations coincided with the optimal period for observing nesting birds, breeding amphibians, and active reptiles. The site was also examined for evidence of scat and tracks of mammals.

RECENT INVESTIGATIONS

Following the previous investigations by Biotic Resources Group in 2004, the project went on hold. In 2015, the investigations were reinitiated by De Novo Planning Group. Additional field surveys were performed by De Novo Planning Group in 2015 September (11th) and in 2016 (April 18th). The surveys served several purposes. First, they served as reconnaissance of the site to establish the existing conditions of the site and to verify information gathered in the pre-field investigation and from previous investigations. This included identification of the habitat types, hydrologic features, topography, soil characteristics, vegetation. Field investigations were performed during the floristic period for species in the region. Field investigations were performed on foot using transects. Habitat was recorded, and the Plan Area was inspected for the presence, or potential for presence of wildlife. The site was also examined for evidence of scat and tracks of mammals.

PRE-FIELD INVESTIGATION

Prior to the field investigation, numerous maps, databases, and reports were reviewed including:

- U.S. Geological Survey (USGS) 7.5-minute Quadrangle
- USGS National Hydrography Data Set
- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps
- National Resource Conservation Service (NRCS) Soil Survey
- California Wildlife Habitat Relationships (CWHR) maps
- California Natural Diversity Database (CNDDB)

- California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants
- U.S. Fish and Wildlife Service's (USFWS) IPac
- U.S. Fish and Wildlife Service's (USFWS) Official List

Field Tools/Equipment

Tools used during the field investigations included a Trimble GeoExplorer XH Handheld (sub-foot unit), 30-meter tape measure, diameter tape, spade, Munsell color chart, Vortex 20-60x80 spotting scope, and Bushnell 10x42 binoculars.

3.2.1 ENVIRONMENTAL SETTING

GEOMORPHIC PROVINCE AND BIOREGION

The City of Salinas is located in the middle portion of the Coast Range Geomorphic Province of California. The Coast Ranges are northwest-trending mountain ranges (2,000 to 4,000, occasionally 6,000 feet elevation above sea level), and valleys. The ranges and valleys trend northwest, subparallel to the San Andreas Fault. The geologic strata dips beneath alluvium of the Great Valley to the east. To the west is the Pacific Ocean. The coastline is uplifted, terraced and wave-cut. The Coast Ranges are composed of thick Mesozoic and Cenozoic sedimentary strata. The northern and southern ranges are separated by a depression containing the San Francisco Bay. The City of Salinas lies within the southern range.

As shown in Figure 3.2-1, the City of Salinas is located in the northern portion of the Central Coast Bioregion. This Bioregion includes marine, freshwater, and terrestrial resources from the Santa Cruz Mountains on the north to Point Conception on the south. The edge of the continental shelf forms the western boundary; on the east the region borders the Central Valley Bioregion.[1]

The Central Coast Bioregion has a wide variety of habitats and vegetation, including coastal prairie scrub, chaparral, mixed hardwoods, oak woodlands, and redwood forests, among many other habitats. The climate in this Bioregion doesn't vary much with the seasons. The northern portion, and more coastal areas, experience relatively cool, often foggy summers, mild falls, and chilly, rainy winters. The southern and inland portions of this Bioregion have hot, dry summers and warm autumns that are followed by mild, wet winters. Snowfall is rare.

LOCAL SETTING

Location

The Specific Plan Area is located within the Salinas incorporated city limits. It is bounded by San Juan Grade Road on the west, East Boronda Road (herein referred to as "Boronda Road") on the

[1] USGS Western Ecological Research Center. 2016. Available: <http://www.werc.usgs.gov/researchtopicpage.aspx?id=20#5>

south, Natividad Road on the east, and Rogge Road and the future extension of Russell Road on the north. Gabilan Creek is located east of the Specific Plan Area, while U.S. Highway 101 (U.S. 101) and North Main Street are located to the west.

Topography

The topography of the Specific Plan Area is nearly flat, with little change in elevation. The overall slope from northeast to southwest is approximately 0.3%, and there are no natural streams or water bodies present on-site. Elevation ranges from approximately 103 to 156 feet above mean sea level.

Climate

The Salinas Valley is oriented northwest-southeast and is parallel to the Pacific Coast. The proximity of the ocean to the open valley mouth, along with prevailing northwesterly winds, tend to give Salinas a moderate climate year-round. The average temperature is 68.2 degrees, with summer temperatures in the 70s, dipping at night into the 50s. Winter temperatures are generally in the low 60s, dropping at night into the middle 30s.

Rainfall in the project area and contributing watershed is relatively uniform across the area. Average annual rainfall is calculated to be approximately 15.5 to 16.1 inches. Average rainfall depths have been estimated to be 2.4 to 2.5 inches for the 10-year, 24-hour event and 4.0 to 4.2 inches for the 100-year, 24-hour event. Monthly evapotranspiration in the project vicinity varied from 1.5 to 4.7 inches in 2015, with a total for that year of 38.0 inches.

Existing Uses

The Specific Plan Area is currently being farmed and contains limited development. Most agricultural activity on-site and in the immediate vicinity has consisted of cultivation of various types of row crops. The site has been heavily disturbed for years from agricultural practices. Urban development consists of McKinnon Elementary School, which is part of the Santa Rita Union School District. McKinnon Elementary is located in the southern portion of the Specific Plan Area, near the intersection of Boronda Road and McKinnon Street. A few residences and farm structures are clustered within the eastern portion of the Specific Plan Area, adjacent to Natividad Road. Other residences with accessory farm structures are located in the northern portion, adjacent to Rogge Road, and in the western portion, near the intersection of San Juan Grade Road and Boronda Road.

In addition, there is evidence of structures or development that formerly existed on-site. An area of bare ground is located near Natividad Road that could have served as a location for activities associated with agricultural operations. Along San Juan Grade Road in the western portion is an area of bare ground with some trees along its northern edge. This was likely at one time the location of a residence that no longer exists.

Existing infrastructure is currently located along Boronda Road including water, sewer, electricity (12kV underground primary line), storm drainage, and dry utilities. PG&E also operates a 60kV

overhead power line transmission (easement) which runs generally in a north/south direction through the Specific Plan Area.

Surrounding Uses

North: The Bolsa Knolls residential area is located to the north of the Specific Plan Area, on the northeastern corner of the intersection of Russell Road and San Juan Grade Road. Scattered residences and other non-residential uses are also located along Rogge Road to the north. Further to the north is a mix of agricultural land, rural residences, and the Club at Crazy Horse Ranch formerly known as the Salinas Golf and Country Club. These land uses are all located in the unincorporated area of Monterey County.

East: Land to the east of the Specific Plan Area is currently used primarily for agricultural production and is zoned New Urbanism Interim (NI) with a Specific Plan Overlay District. This area is located in the North of Boronda Future Growth Area (FGA) and a specific plan (referred to as the Central Area Specific Plan [CASP]) has been submitted to the City and is currently being processed for this area. The CASP proposes a mix of urban land uses, similar to those proposed for the WASP.

South: Across Boronda Road directly to the south is the Harden Ranch Specific Plan Area. The portion of the Harden Ranch Specific Plan Area which abuts the Specific Plan Area is primarily residential. Most of the residences are of the type associated with low density residential uses, mainly single-family detached homes. However, some medium density and high density (apartment) units are located in this area as well. These residential uses are zoned R-L-5.5 (Residential Low Density), R-M-2.9 (Residential Medium Density), and R-H-1.8 (Residential High Density). Single-family detached homes (zoned R-L 5.5) are also located to the southeast of the Specific Plan Area (east of Natividad Road). Other land uses in the Harden Ranch Specific Plan Area include a commercial shopping center (Shaker Square) located at the southwest corner of Natividad Road and Boronda Road which is zoned CR (Commercial Retail), and the New Republic Elementary School (Santa Rita Union School District) which is zoned PS (Public/Semipublic). Extensive commercial development is located generally west and southwest of the Specific Plan Area, along both North Main Street and U.S. 101. This is the location of some of the major retail centers in Salinas, including the Northridge Shopping Center, Santa Rita Shopping Center and Harden Ranch Plaza. These areas are zoned CR.

West: The area directly to the west is residential consisting of low, medium and high density residential uses. These uses are zoned R-L-5.5, R-M-2.9, and R-H-2.1. Also located farther to the west is Santa Rita Elementary School (Santa Rita Union School District) which is zoned PS.

Vegetation

The Specific Plan Area primarily consists of vacant farm fields that have been leveled for agricultural use. This area is currently being farmed and contains limited development. Most agricultural activity on-site and in the immediate vicinity has consisted of cultivation of various types of row crops, with strawberries and lettuce being the most prevalent. Non-cultivated portions of the Specific Plan Area are vegetated with various non-native annual grassland species, such as oats (*Avena* sp.), soft chess brome (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), foxtail

barley (*Hordeum murinum*), Bermuda grass (*Cynodon dactylon*), perennial ryegrass (*Lolium perenne*), fiddleneck (*Amsinckia menziesii*), black mustard (*Brassica nigra*), bull thistle (*Cirsium vulgare*), prickly lettuce (*Lactuca serriola*), pigweed (*Amaranthus albus*), dove weed (*Eremocarpus setigerus*), common mallow (*Malva neglecta*) and filaree (*Erodium botrys*).

There are a few trees located in the Specific Plan Area. All of the on-site trees are landscape trees located in the western portion of the Specific Plan Area along San Juan Grade Road. A few scattered trees are located near the residence southeast of the San Juan Grade Road and Van Buren Avenue intersection, and a few are located further north at another private residence on San Juan Grade Road. The species of these trees are eucalyptus (*Eucalyptus* sp.) and other ornamental species types.

Wildlife

A limited number of wildlife species were observed during field surveys of the Specific Plan Area. The wildlife observations are shown in Figure 3.2-2. California horned lark (*Eremophila alpestris actia*) was observed on-site, and Yellow warbler (*Dendroica petechia*) was observed near Gabilan Creek, east of the Specific Plan Area.

Some of the more common birds found in the vicinity of the Specific Plan Area include: red-tailed hawk (*Buteo jamaicensis*), yellow-billed magpie (*Pica nuttalli*), northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), western scrub jay (*Aphelocoma coerulescens*) red-winged blackbird (*Agelaius phoeniceus*), killdeer (*Charadrius vociferous*), and yellow warbler (*Dendroica petechia*). Some of the more common mammals found in the vicinity include: ornate shrew (*Sorex ornatus*), pocket gopher (*Thomomys bottae*), western harvest mouse (*Reithrodontomys megalottis*), California meadow vole (*Peromyscus maniculatus*), California ground squirrel (*Spermophilus beecheyi*), black-tailed hare (*Lepus californicus*), American badger (*Taxidea taxus*), striped skunk (*Mephitis mephitis*), coyote (*Canis latrans*), fed fox (*Vulpes fulva*), raccoon (*Procyon lotor*). Some of the more common amphibians and reptiles in the vicinity include: coast horned lizard (*Phrynosoma coronatum*), western toad (*Bufo boreas*), common king snake (*Lampropeltis getulus*), gopher snake (*Pituophis melanoleucus*), and common garter snake (*Thamnophis sirtalis*).

Plant Communities

Agricultural and natural plant communities provide habitat for a variety of biological resources in the region. Sensitive habitats include those that are of special concern to resource agencies or those that are protected under a Habitat Conservation Plan, Natural Community Conservation Plan, the California Environmental Quality Act (CEQA), the Fish and Game Code, or the Clean Water Act (CWA). Additionally, sensitive habitats are usually protected under specific policies from local agencies. Below is a brief description of the communities found in the Specific Plan Area. Figure 3.2-3 illustrates the plant communities in the Specific Plan Area (including agricultural fields, developed areas, landscape trees, and pond).

AGRICULTURAL FIELDS

Cropland: Croplands are established on the State's most fertile soils, which historically supported an abundance of wildlife unequalled in other sites. Croplands have greatly reduced the wildlife richness and diversity of California. Many species of rodents and birds have adapted to croplands and are controlled by fencing, trapping, and poisoning to prevent excessive crop losses (California Department of Food and Agriculture 1975). Croplands flooded for weed control, leaching, irrigation, or waterfowl hunting serve as freshwater wetlands for a variety of associated wetland wildlife, including shorebirds, wading birds, and gulls. Croplands are located on flat to gently rolling terrain. When flat terrain is put into crop production, it usually is leveled to facilitate irrigation. Rolling terrain is either dry farmed or irrigated by sprinklers. Soils often dictate the crops grown. Cropland habitat is a large portion of the Specific Plan Area.

Annual Grassland (Field Margins): Annual Grassland habitats are open grasslands composed primarily of annual plant species. Many wildlife species use Annual Grasslands for foraging, but some require special habitat features such as cliffs, caves, ponds, or habitats with woody plants for breeding, resting, and escape cover. Annual Grassland habitats are very sparse throughout the Specific Plan Area, only a few small areas are located along the edge/fringe of the cropland in areas that are not cultivated.

Barren: Barren habitat may be found in juxtaposition with many different habitats, depending on the region of the state. Where there is little or no vegetation, structure of the non-vegetated substrate becomes a critical component of the habitat. The physical settings for barren habitat represent extreme environments for vegetation or disturbance. Constant disturbance by either human or natural forces, can contribute to a habitat being inhospitable to plants. Barren habitat are very sparse throughout the Specific Plan Area, only a few small areas are located along the farm roads and edge/fringe of the cropland in areas that are not cultivated. Some of the edge/fringe areas transition from annual grassland to barren depending on the frequency of disturbance.

DEVELOPED AREAS

Developed: Development has occurred within or adjacent to most other habitats in California, with the highest density at lower elevations. The majority of urban development exceeding 10,000 in population were developed in grassland or scrub (coastal sagebrush or chaparral) vegetation. Three urban categories relevant to wildlife are distinguished: downtown, urban residential, and suburbia. A heavily-developed downtown is usually at the center, followed by concentric zones of urban residential and suburbs. There is a progression outward of decreasing development and increasing vegetative cover. Species richness and diversity is extremely low in the inner cover and is progressively increased toward the outer edge of urbanization. The urban residential zone is characterized by a denser and more varied mosaic of vegetation shade trees, lawns, hedges and planted gardens; approximately 40 percent of the land's surface is covered by impervious material. Urban habitats surround the Specific Plan Area to the south and west, with very limited urban development within the Specific Plan Area.

Landscape Trees (Eucalyptus and others): Eucalyptus and other landscape trees generally adjoin a number of other wildlife habitats and are found at low elevations, where freezing is not a problem. Most eucalyptus and other landscape trees have been artificially established, usually in and around urban/rural areas. Characteristic species of this habitat include crow, raven, barn owl, red-tailed, and red-shouldered hawks. Landscape trees are important as roosts, perches, and nest sites for a number of bird species, particularly raptors. Eucalyptus bark and litter, create micro habitats for a number of small vertebrate species, including alligator lizard, gopher snake, and woodrat. Eucalyptus habitats are not very prevalent within the Specific Plan Area, with one small location on the upper west portion of the Specific Plan Area.

OTHER

Pond (dry): There is an area located near the intersection of Natividad Road and Rogge Road that had a dry pond during previous surveys. The most recent surveys show that this dry pond is no longer present. Aerial photos show that the dry pond was converted back to agricultural use sometime around 2004 to 2005. This area has been farmed ever since.

Soils

The U.S. Department of Agriculture (USDA)/Natural Resource Conservation Service (NRCS) Web Soil Survey indicates the presence of five soil types occurring within the Specific Plan Area. Table 3.2-1 identifies the soils found in the Specific Plan Area.

TABLE 3.2-1: USDA SOIL SERIES INFORMATION

UNIT SYMBOL	*NAME*	*PERCENT OF AOI*
AsA	Arroyo Seco gravelly sandy loam, 0 to 2 percent slopes	3.0%
AvA	Arroyo Seco gravelly loam, 0 to 2 percent slopes	1.5%
CbA	Chualar loam, 0 to 2 percent slopes	80.4%
CbB	Chualar loam, 2 to 5 percent slopes	6.7%
PnA	Placentia sandy loam, 0 to 2 percent slopes, MLRA 14	8.4%

SOURCE: NRCS WEB SOIL SURVEY, 2016.

Arroyo Seco series. This series consists of well-drained soils on nearly level to moderately sloping flood plains and alluvial fans at elevations of 100 to 3,000 feet. The soils formed in alluvium dominantly from granitic sources, but include alluvium from schist, gneiss, sandstone, and siliceous shale. Slopes range from 0 to 2 percent. This series is characterized as having slow to medium runoff and moderately rapid permeability.

Chualar series. This series consists of well-drained soils on terraces and fans of the coastal areas. The soils formed in alluvial material from mixed rock source. Slopes range from 0 to 9 percent. This series is characterized as having slow to medium runoff and moderately slow permeability.

Placentia series. This series consists of well or moderately well drained soils on fans and terraces at elevations of 50 to 2,500 feet. The soils formed in alluvium from granite and other rocks of similar composition and texture. This series is characterized as having slow to rapid runoff and very slow permeability.

Hydrogeomorphic Features

The City of Salinas is located in the Lower Salinas River Watershed. The Lower Salinas River Watershed area is characterized by both ephemeral and perennial stream reaches. The City's storm drainage system conveys runoff to the following major receiving waters: Reclamation Ditch, Carr Lake, Gabilan Creek, Natividad Creek, Santa Rita Creek, Markeley Swamp, and Salinas River. Natividad Creek and Gabilan Creek originate north of the City, then flow south through the City and drain to the Carr Lake area. At Carr Lake, both Gabilan and Natividad Creeks are tributaries to the Reclamation Ditch. During major storms with high backwater in the Reclamation Ditch, these creeks overflow at their downstream end and inundate large areas of Carr Lake.

The Reclamation Ditch is a major drainage channel that flows from east to west through the City. Most of the City drains to the Reclamation Ditch, which was constructed in 1917 following formation of Reclamation District No. 1665. Carr Lake is a dry lakebed on the Reclamation Ditch that now functions as detention storage for the ditch during winter rainy periods.

There are numerous hydrogeomorphic features in the regional vicinity of the Specific Plan Area, but none are located on-site (see Figure 3.2-4). As noted previously, there is an area located near the intersection of Natividad Road and Rogge Road that had a dry pond during previous surveys. The most recent surveys show that this dry pond is no longer present. Aerial photos show that the dry pond was converted back to agricultural use sometime around 2004 to 2005. This area has been farmed ever since.

SPECIAL-STATUS SPECIES

The following discussion is based on a background search of special-status species that are documented in the California Natural Diversity Database (CNDDB), the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants, and the U.S. Fish and Wildlife Service's (USFWS) endangered and threatened species lists. The background search was regional in scope and focused on the documented occurrences within a nine-quadrangle area (U.S. Geological Survey [USGS] 7.5-minute quadrangle maps). Table 3.2-2 provides a list of special-status plants and Table 3.2-3 provides a list of special-status animals that are found in the regional vicinity. Figure 3.2-5 shows the CNDDB occurrences within one mile of the Specific Plan Area, and Figure 3.2-6 shows all occurrences within the nine-quadrangle area.

TABLE 3.2-2: SPECIAL-STATUS PLANT SPECIES WHICH MAY OCCUR IN SPECIFIC PLAN AREA

SPECIES	STATUS (FED./CA/CNPS)	GEOGRAPHIC DISTRIBUTION (COUNTIES)	HABITAT	BLOOMING PERIOD	POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA
Hickman's Onion *Allium hickmanii*	--/--/1B.2	Monterey, San Luis Obispo	Closed-cone coniferous forest, chaparral, coastal scrub, coastal prairie, cismontane woodland. Sandy loam, damp ground and vernal swales; mostly in grassland though can be associated with chaparral or woodland. 5-200 m.	March-May	Specific Plan Area does not provide suitable habitat.
Toro manzanita *Arctostaphylos montereyensis*	--/--/1B.2	Monterey	Chaparral, cismontane woodland, coastal scrub. Sandy soil, usually with chaparral associates. 45-765 m.	Feb-Mar	Specific Plan Area does not provide suitable habitat.
Hooker's manzanita *Arctostaphylos hookeri ssp. hookeri*	--/--/1B.2	Monterey, Santa Cruz	Chaparral, coastal scrub, closed-cone coniferous forest, cismontane woodland. Sandy soils, sandy shales, sandstone outcrops. 30-550 m.	Jan-June	Specific Plan Area does not provide suitable habitat.
Pajaro manzanita *Arctostaphylos pajaroensis*	--/--/1B.1	Monterey, San Benito, Santa Cruz	Closed-cone coniferous forest, maritime chaparral, coastal scrub, coastal dunes. Sandy soils. 30-155 m.	Dec-March	Specific Plan Area does not provide suitable habitat.
Alkali milk-vetch *Astragalus tener var. tener*	--/--/1B.2	Alameda, Contra Costa, Merced, Monterey, Napa, San Benito, Santa Clara, San Francisco, San Joaquin. Solano, Sonoma, Stanislaus, Yolo	Alkali playa, valley and foothill grassland, vernal pools. Low ground, alkali flats, and flooded lands; in annual grassland or in playas or vernal pools. 0-168 m.	March-June	Specific Plan Area does not provide suitable habitat.
San Joaquin saltbrush *Atriplex joaquiniana*	--/--/1B.2	Alameda, Contra Costa, Colusa, Fresno, Glenn, Merced, Monterey, Napa, San Benito, Santa Clara, San Joaquin, San Luis Obispo, Solano, Tulare, Yolo	Alkali grassland and alkali meadow, or on the margins of alkali scrub. Occurs on clay soils, often in areas of high alkalinity. 0-322 m.	April-October	Specific Plan Area does not provide suitable habitat.
Congdon's tarplant *Centromadia parryi ssp. congdonii*	--/--/1B.1	Alameda, Contra Costa, Monterey, Santa Clara, Santa Cruz, San Luis Obispo, San Mateo, Solano	Valley and foothill grassland. Alkaline soils, sometimes described as heavy white clay. 0-230 m.	May-November	Specific Plan Area does not provide suitable habitat.
Monterey spineflower *Chorizanthe pungens var. pungens*	T/--/1B.2	Monterey, Santa Cruz, San Luis Obispo	Coastal dunes, chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Sandy soils in coastal dunes or more inland within chaparral or other habitats. 0-170 m.	April-August	Specific Plan Area does not provide suitable habitat.
Robust spineflower *Chorizanthe robusta var. robusta*	E/--/1B.1	Alameda, Monterey, Marin, Santa Clara, Santa Cruz, San Francisco, San Mateo	Cismontane woodland, coastal dunes, coastal scrub, chaparral. Sandy terraces and bluffs or in loose sand. 9-245 m.	April-Sept	Specific Plan Area does not provide suitable habitat.
Contra Costa goldfields *Lasthenia conjugens*	E/--/1B.1	Alameda, Contra Costa, Mendocino, Monterey, Marin, Napa, Santa Barbara, Santa Clara, Solano, Sonoma	Valley and foothill grassland, vernal pools, alkaline playas, cismontane woodland. Vernal pools, swales, low depressions, in open grassy areas. 1-450 m.	March-June	Specific Plan Area does not provide suitable habitat.
Marsh microseris *Microseris paludosa*	--/--/1B.2	Mendocino, Monterey, Marin, San Benito, Santa Cruz, San Francisco, San Luis Obispo, San Mateo, Solano, Sonoma	Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland. 3-610 m.	April-July	Specific Plan Area does not provide suitable habitat.

SPECIES	*STATUS (FED./CA/CNPS)*	*GEOGRAPHIC DISTRIBUTION (COUNTIES)*	*HABITAT*	*BLOOMING PERIOD*	*POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA*
Yadon's rein orchid *Piperia yadonii*	E/--/1B.1	Monterey	Closed-cone coniferous forest, chaparral, coastal bluff scrub. On sandstone and sandy soil, but poorly drained and often dry. 10-505 m.	Feb-August	Specific Plan Area does not provide suitable habitat.
Santa Cruz clover *Trifolium buckwestiorum*	--/--/1B.1	Mendocino, Monterey, Santa Cruz, Sonoma	Coastal prairie, broad-leafed upland forest, cismontane woodland. Moist grassland. Gravelly margins. 30-550 m.	April-October	Specific Plan Area does not provide suitable habitat.
Saline clover *Trifolium depauperatum var. hydrophylum*	--/--/1B.2	Alameda, Contra Costa, Colusa, Lake, Monterey, Napa, Sacramento, San Benito, Santa Clara, Santa Cruz, San Joaquin, San Luis Obispo, San Mateo, Solano, Sonoma, Yolo	Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. 1-335 m.	April-June	Specific Plan Area does not provide suitable habitat.
Pacific Grove clover *Trifolium polyodon*	--/R/1B.1	Monterey	Closed-cone coniferous forest, meadows and seeps, coastal prairie, valley and foothill grassland. Along small springs and seeps in grassy openings. 5-260 m.	April-Jul	Specific Plan Area does not provide suitable habitat.
Monterey Pine *Pinus radiate*	--/--/1B.1	Monterey, Santa Cruz, San Luis Obispo, San Mateo	Closed-cone coniferous forest, cismontane woodland. Three primary stands are native to California. Dry bluffs and slopes. 60-125 m.	N/A	Specific Plan Area does not provide suitable habitat.
Eastwood's goldenbush *Ericameria fasciculate*	--/--/1B.1	Monterey	Closed-cone coniferous forest, chaparral (maritime), coastal scrub, coastal dunes. In sandy openings. 30-215 m.	July-October	Specific Plan Area does not provide suitable habitat.
Seaside bird's-beak *Cordylanthus rigidus ssp. Littoralis*	--/E/1B.1	Monterey, Santa Barbara	Closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub, coastal dunes. Sandy, often disturbed sites, usually within chaparral or coastal scrub. 30-520 m.	April-October	Specific Plan Area does not provide suitable habitat.
Kellogg's horkelia *Horkelia cuneata var. sericea*	--/--/1B.1	Alameda, Monterey, Marin, Santa Barbara, Santa Cruz, San Francisco, San Luis Obispo, San Mateo	Closed-cone coniferous forest, coastal scrub, coastal dunes, chaparral. Old dunes, coastal sandhills; openings. Sandy or gravelly soils. 5-430 m.	April-September	Specific Plan Area does not provide suitable habitat
Pink Johnny-nip *Castilleja ambigua var. insalutata*	--/--/1B.1	Monterey, San Luis Obispo	Coastal bluff scrub, coastal prairie. 0-100 m.	May-August	Specific Plan Area does not provide suitable habitat
legenere *Legenere limosa*	--/--/1B.1	Alameda, Lake, Monterey, Napa, Placer, Sacramento, Santa Clara, Shasta, San Joaquin, San Mateo, Solano, Sonoma, Stanislaus, Tehama, Yuba	Vernal pools. In beds of vernal pools. 1-880 m.	April-June	Specific Plan Area does not provide suitable habitat.
Menzies' wallflower *Erysimum menziesii*	E/E/1B.1	Humboldt, Mendocino, Monterey	Coastal dunes. Localized on dunes and coastal strand. 1-25 m.	March-September	Specific Plan Area does not provide suitable habitat.
Oregon meconella *Meconella oregaa*	--/--/1B.1	Contra Costa, Monterey, Santa Clara, San Luis Obispo	Coastal prairie, coastal scrub. Open, moist places. 60-640 m.	March-April	Specific Plan Area does not provide suitable habitat.
Vernal pool bent grass *Agrostis lacuna-vernalis*	--/--/1B.1	Monterey	Vernal pools. In mima mound areas or on the margins of vernal pools. 125-150 m.	April-May	Specific Plan Area does not provide suitable habitat.

SPECIES	*STATUS (FED./CA/CNPS)*	*GEOGRAPHIC DISTRIBUTION (COUNTIES)*	*HABITAT*	*BLOOMING PERIOD*	*POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA*
San Francisco popcornflower *Plagiobothrys diffusus*	--/E/1B.1	Alameda, San Benito, Santa Cruz, San Francisco, San Mateo	Valley and foothill grassland, coastal prairie. Historically from grassy slopes with marine influence. 45-360 m.	March-June	Specific Plan Area does not provide suitable habitat.
Sandmat manzanita *Arctostaphylos pumila*	--/--/1B.2	Monterey	Closed-cone coniferous forest, chaparral, cismontane woodland, coastal dunes, coastal scrub. On sandy soil with other chaparral associates. 3-210 m.	February-May	Specific Plan Area does not provide suitable habitat
Toro manzanita *Arctostaphylos montereyensis*	--/--/1B.2	Monterey	Chaparral, cismontane woodland, coastal scrub. Sandy soil, usually with chaparral associates. 45-765 m.	February-March	Specific Plan Area does not provide suitable habitat.
Hospital Canyon larkspur *Delphinium californicum ssp. Interius*	--/--/1B.2	Alameda, Contra Costa, Merced, Monterey, San Benito, Santa Clara, San Joaquin, Stanislaus	Cismontane woodland, chaparral, coastal scrub. In wet, boggy meadows, openings in chaparral and in canyons. 195-1095 m.	April-June	Specific Plan Area does not provide suitable habitat.
Fragrant fritillary *Fritillaria liliacea*	--/--/1B.2	Alameda, Contra Costa, Monterey, Marin, San Benito, Santa Clara, San Francisco, San Mateo, Solano, Sonoma	Coastal scrub, valley and foothill grassland, coastal prairie, cismontane woodland. Often on serpentine; various soils reported though usually on clay, in grassland. 3-400 m.	February-April	Specific Plan Area does not provide suitable habitat.
Jolon clarkia *Clarkia jolonensis*	--/--/1B.2	Monterey	Cismontane woodland, chaparral, coastal scrub, riparian woodland. 10-1280 m.	April-June	Specific Plan Area does not provide suitable habitat.
Sand-loving wallflower *Erysimum ammophilum*	--/--/1B.2	Monterey, Santa Barbara, Santa Cruz, San Miguel Island, San Mateo	Chaparral (maritime), coastal dunes, coastal scrub. Sandy openings. 5-130 m.	February-June	Specific Plan Area does not provide suitable habitat.
Northern curly-leaved monardella *Monardella sinuata ssp. Nigrescens*	--/--/1B.2	Monterey, Marin, Santa Cruz, San Francisco	Coastal dunes, coastal scrub, chaparral, lower montane coniferous forest. Sandy soils. 10-245 m.	Apr-Sept	Specific Plan Area does not provide suitable habitat.
Monterey gilia *Gilia tenuiflora ssp. Arenaria*	E/T/1B.2	Monterey, Santa Cruz	Coastal dunes, coastal scrub, chaparral (maritime), cismontane woodland. Sandy openings in bare, wind-sheltered areas. Often near dune summit or in the hind dunes; two records from Pleistocene inland dunes. 5-245 m.	April-June	Specific Plan Area does not provide suitable habitat.
Woodland woollythreads *Monolopia gracilens*	--/--/1B.2	Alameda, Contra Costa, Monterey, San Benito, Santa Clara, Santa Cruz, San Luis Obispo, San Mateo	Chaparral, valley and foothill grassland, cismontane woodland, broad-leafed upland forest, North Coast coniferous forest. Grassy sites, in openings; sandy to rocky soils. Often seen on serpentine after burns, but may have only weak affinity to serpentine. 120-975 m.	Feb-Jul	Specific Plan Area does not provide suitable habitat.
Pine rose *Rosa pinetorum*	--/--/1B.2	Monterey, Santa Cruz	Closed-cone coniferous forest, cismontane woodland. 5-1090 m.	May-July	Specific Plan Area does not provide suitable habitat.

SPECIES	*STATUS (FED./CA/CNPS)*	*GEOGRAPHIC DISTRIBUTION (COUNTIES)*	*HABITAT*	*BLOOMING PERIOD*	*POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA*
Carmel Valley bush-mallow *Malacothamnus palmeri var. involucratus*	--/--/1B.2	Monterey, San Luis Obispo	Cismontane woodland, chaparral, coastal scrub. Talus hilltops and slopes, sometimes on serpentine. Fire dependent. 5-520 m.	April-October	Specific Plan Area does not provide suitable habitat.
Carmel Valley malacothrix *Malacothrix saxatilis var. arachnoidea*	--/--/1B.2	Monterey, Santa Barbara, San Benito, San Luis Obispo	Chaparral, coastal scrub. Rock outcrops or steep rocky roadcuts. 30-1040 m.	Mar-Dec	Specific Plan Area does not provide suitable habitat.
Fort Ord spineflower *Chorizanthe minutiflora*	--/--/1B.2	Monterey	Coastal scrub, chaparral (maritime). Sandy, openings. 60-145 m.	April-June	Specific Plan Area does not provide suitable habitat.
Point Reyes horkelia *Horkelia marinensis*	--/--/1B.2	Mendocino, Monterey, Marin, Santa Cruz, San Mateo, Sonoma	Coastal dunes, coastal prairie, coastal scrub. Sandy flats and dunes near coast; in grassland or scrub plant communities. 2-775 m.	May-September	Specific Plan Area does not provide suitable habitat.
Hutchinson's larkspur *Delphinium hutchinsoniae*	--/--/1B.2	Monterey	Broadleafed upland forest, chaparral, coastal prairie, coastal scrub. On semi-shaded, slightly moist slopes, usually west-facing. 15-535 m.	March-June	Specific Plan Area does not provide suitable habitat.
Round-leaved filaree *California macrophylla*	--/--/1B.2	Alameda, Butte, Contra Costa, Colusa, Fresno, Glenn, Kings, Kern, Lake, Los Angeles, Merced, Monterey, Napa, Riverside, Santa Barbara, San Benito, Santa Clara, Santa Catalina Island, Santa Cruz Island, San Diego, San Joaquin, San Luis Obispo, San Mateo, Solano, Sonoma, Stanislaus, Tehama, Tulare, Ventura, Yolo	Cismontane woodland, valley and foothill grassland. Clay soils. 30-1345 m.	March-May	Specific Plan Area does not provide suitable habitat.
Choris' popcornflower *Plagiobothrys chorisianus var. chorisianus*	--/--/1B.2	Alameda, Monterey, Santa Clara, Santa Cruz, San Francisco, San Mateo	Chaparral, coastal scrub, coastal prairie. Mesic sites. 2-705 m.	March-June	Specific Plan Area does not provide suitable habitat.
Santa Cruz microseris *Stebbinsoseris decipiens*	--/--/1B.2	Monterey, Marin, Santa Cruz, San Francisco, San Mateo	Broadleafed upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland. Open areas in loose or disturbed soil, usually derived from sandstone, shale or serpentine, on seaward slopes. 90-750 m.	April-May	Specific Plan Area does not provide suitable habitat.
Pinnacles buckwheat *Eriogonum nortonii*	--/--/1B.3	Monterey, San Benito	Chaparral, valley and foothill grassland. Sandy soils; often on recent burns; western Santa Lucias. 90-975 m.	Apr-Sep	Specific Plan Area does not provide suitable habitat.
Umbrella larkspur *Delphinium umbraculorum*	--/--/1B.3	Kern, Monterey, Santa Barbara, San Luis Obispo, Ventura	Cismontane woodland, chaparral. Mesic sites. 215-2075 m.	April-June	Specific Plan Area does not provide suitable habitat.

NOTES:
FEDERAL
E = ENDANGERED UNDER THE FEDERAL ENDANGERED SPECIES ACT.
T = THREATENED UNDER THE FEDERAL ENDANGERED SPECIES ACT.
STATE
E = ENDANGERED UNDER THE CALIFORNIA ENDANGERED SPECIES ACT.
T = THREATENED UNDER THE FEDERAL CALIFORNIA ENDANGERED SPECIES ACT.
R = RARE UNDER THE CALIFORNIA ENDANGERED SPECIES ACT

CALIFORNIA NATIVE PLANT SOCIETY
1B = RARE, THREATENED, OR ENDANGERED IN CALIFORNIA AND ELSEWHERE.
2 = RARE, THREATENED, OR ENDANGERED IN CALIFORNIA, BUT MORE COMMON ELSEWHERE.
3 = A REVIEW LIST – PLANTS ABOUT WHICH MORE INFORMATION IS NEEDED.
4 = PLANTS OF LIMITED DISTRIBUTION – A WATCH LIST
.1 = SERIOUSLY ENDANGERED IN CALIFORNIA (OVER 80% OF OCCURRENCES THREATENED-HIGH DEGREE AND IMMEDIACY OF THREAT).
.2 = FAIRLY ENDANGERED IN CALIFORNIA (20-80% OCCURRENCES THREATENED).
.3 = NOT VERY ENDANGERED IN CALIFORNIA (<20% OF OCCURRENCES THREATENED).

TABLE 3.2-3: SPECIAL-STATUS WILDLIFE AND FISH SPECIES WHICH MAY OCCUR IN SPECIFIC PLAN AREA

SPECIES	*STATUS (FED/CA)*	*GEOGRAPHIC DISTRIBUTION*	*HABITAT REQUIREMENTS*	*POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA*
INVERTEBRATES				
Obscure bumble bee *Bombus caliginosus*	--/--	Occur in Mediterranean California and the Pacific Coast.	Coastal areas from Santa Barbara county to north to Washington state. Food plant genera include Baccharis, Cirsium, Lupinus, Lotus, Grindelia and Phacelia.	Specific Plan Area does not provide suitable habitat.
Western bumble bee *Bombus occidentalis*	--/--	Occur in the western United States and western Canada.	Once common & widespread, species has declined precipitously from central CA to southern B.C., perhaps from disease.	Specific Plan Area does not provide suitable habitat.
Globose dune beetle *Coelus globosus*	--/--	Found in Mexico and the United States.	Inhabitant of coastal sand dune habitat; erratically distributed from Ten Mile Creek in Mendocino County south to Ensenada, Mexico. Inhabits foredunes and sand hummocks; it burrows beneath the sand surface and is most common beneath dune vegetation.	Specific Plan Area does not provide suitable habitat.
Monarch - California overwintering population *Danaus plexippus pop. 1*	--/--	The majority of monarch butterflies live east of the Rocky Mountains. In the early spring, they are first seen in Texas and the south. As spring turns to summer, they're seen in more and more states and Canada.	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	The eucalyptus trees located along San Juan Grade Road provide some limited winter roost habitat Specific Plan Area does not provide suitable habitat.
Smith's blue butterfly *Euphilotes enoptes smithi*	FE/--	Found in the California/Nevada region.	Most commonly associated with coastal dunes & coastal sage scrub plant communities in Monterey & Santa Cruz counties. Hostplant: *Eriogonum latifolium* and *Eriogonum parvifolium* are utilized as both larval and adult foodplants.	Specific Plan Area does not provide suitable habitat.
Redwood shoulderband *Helminthoglypta sequoicola consors*	--/--	Found within Monterey County. Known only from south slope of San Juan Grade, near Foot, 8 miles NW of Salinas.	Coastal scrub.	Specific Plan Area does not provide suitable habitat.

SPECIES	*STATUS (FED/CA)*	*GEOGRAPHIC DISTRIBUTION*	*HABITAT REQUIREMENTS*	*POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA*
California linderiella *Linderiella occidentalis*	--/--	It has been documented on most land forms, geologic formations and soil types supporting vernal pools in California, at altitudes as high as 1,150 meters (3,770 ft) above sea level. Most common in the Central Valley.	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions. Water in the pools has very low alkalinity, conductivity, and total dissolved solids.	Specific Plan Area does not provide suitable habitat.
Pinnacles optioservus riffle beetle *Optioservus canus*	--/--	Chalone Creek, Pinnacles Nat. Mon. of west central California.	Aquatic. Found on rocks and in gravel of riffles in cool, swift, clear streams.	Specific Plan Area does not provide suitable habitat.
California Ridgway's rail *Rallus obsoletus obsoletus*	FE/CE	Is found principally in California's San Francisco Bay to southern Baja California.	Salt water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed, but feeds away from cover on invertebrates from mud-bottomed sloughs.	Specific Plan Area does not provide suitable habitat.
Mimic tryonia (=California brackishwater snail) *Tryonia imitator*	--/--	Southern California coast from just north of San Francisco to Ensenada, Mexico, to dispersal among semicontinuous estuarine habitats along the Pacific coast.	Inhabits coastal lagoons, estuaries and salt marshes, from Sonoma County south to San Diego County. Found only in permanently submerged areas in a variety of sediment types; able to withstand a wide range of salinities.	Specific Plan Area does not provide suitable habitat.
AMPHIBIANS				
California tiger salamander *Ambystoma californiense*	FT/CT	Central Valley, including Sierra Nevada foothills, up to approximately 1,000 feet, and coastal region from Butte County south to northeastern San Luis Obispo County.	Central Valley DPS federally listed as threatened. Santa Barbara and Sonoma counties DPS federally listed as endangered. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	Appropriate habitat is present in the vicinity. Observed along Natividad Road adjacent to the Specific Plan Area.
Foothill yellow-legged frog *Rana boylii*	--/C	Occurs in the Klamath, Cascade, north Coast, south Coast, Transverse, and Sierra Nevada Ranges up to approximately 6,000 feet.	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	Appropriate habitat is present in the vicinity. None observed on-site or in the vicinity.
California red-legged frog *Rana draytonii*	FT/SSC	California red-legged frogs are found almost exclusively in California with a few sightings in Baja, Mexico. Historically, they could be seen throughout most of the California coastal areas; however, their population has dwindled.	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Appropriate habitat is present in the vicinity. Observed in the vicinity, but none observed on-site.
Santa Cruz long-toed salamander *Ambystoma macrodactylum croceum*	FE/CE	The Santa Cruz long-toed salamander is a relict species, previously widespread throughout California after the Pleistocene era, and is now concentrated in the area of Santa Cruz, California.	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. Adults use mammal burrows.	Specific Plan Area does not provide suitable habitat.
Coast Range newt *Taricha torosa*	--/SSC	Is primarily located on the Coastal Range of California from Humboldt County to the Mexican border. Other isolated populations are also located in California, along the western slope of the Sierra Nevada mountain range.	Coastal drainages from Mendocino County to San Diego County. Lives in terrestrial habitats & will migrate over 1 km to breed in ponds, reservoirs & slow-moving streams.	Specific Plan Area does not provide suitable habitat.

SPECIES	*STATUS (FED/CA)*	*GEOGRAPHIC DISTRIBUTION*	*HABITAT REQUIREMENTS*	*POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA*
BIRDS				
Cooper's Hawk *Accipiter cooperii*	--/SSC	Found from Southern Canada to Northern Mexico.	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	Limited foraging habitat present.
Tricolored Blackbird *Agelaius tricolor*	--/C (SSC)	Permanent resident in the Central Valley from Butte County to Kern County. Breeds at scattered coastal locations from Marin County south to San Diego County; and at scattered locations in Lake, Sonoma, and Solano Counties. Rare nester in Siskiyou, Modoc, and Lassen Counties.	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Specific Plan Area does not provide suitable habitat.
Golden eagle *Aquila chrysaetos*	FP/WL	They occur throughout Eurasia, in northern Africa, and in North America. In North America, golden eagles are found in the western half of the continent, from Alaska to central Mexico, with small numbers in eastern Canada and scattered pairs in the eastern United States	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Limited foraging habitat present.
Short-eared owl *Asio flammeus*	--/SSC	Short-eared owls are one of the world's most widely distributed owls. They inhabit all of North and South America; this area includes the coast of the Arctic Ocean to Pantagonia. Short-eared owls can also be found on every continent except Australia and Antarctica.	Found in swamp lands, both fresh and salt; lowland meadows; irrigated alfalfa fields. Tule patches/tall grass needed for nesting/daytime seclusion. Nests on dry ground in depression concealed in vegetation.	Limited foraging habitat present.
Burrowing Owl *Athene cunicularia*	--/SSC	Lowlands throughout California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas. Rare along south coast.	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Limited foraging habitat present., but limited by ground disturbance. None observed.
Ferruginous hawk *Buteo regalis*	--/WL	The Ferruginous Hawk can be found in North America, as far north as Canada, south through western and central United States to northern Texas. It winters south to northern Mexico.	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	Limited foraging habitat present.
Swainson's hawk *Buteo swainsoni*	--/CT	Lower Sacramento and San Joaquin Valleys, the Klamath Basin, and Butte Valley. Highest nesting densities occur near Davis and Woodland, Yolo County.	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Limited foraging habitat present.
Western snowy plover *Charadrius alexandrinus nivosus*	FT/SSC	Occurs in Grays Harbor and Pacific counties, Washington.	Sandy beaches, salt pond levees & shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	Specific Plan Area does not provide suitable habitat.

SPECIES	*STATUS (FED/CA)*	*GEOGRAPHIC DISTRIBUTION*	*HABITAT REQUIREMENTS*	*POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA*
Northern Harrier *Circus cyaneus*	--/SSC	Have a broad distribution across North America and Eurasia.	Found mostly in open habitats. Reside in fields, savannas, meadows, marshes, prairies and deserts. The largest populations tend to be in dense and low vegetative areas.	Limited foraging habitat present.
White-tailed Kite *Elanus leucurus*	--/FP	Found in western North America and parts of South America.	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Limited foraging habitat present.
California Horned Lark *Eremophila alpestris actia*	--/SSC	Found along the coast of California.	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	Appropriate habitat is present. This species has been observed within the Specific Plan Area.
Prairie falcon *Falco mexicanus*	--/WL	*Falco mexicanus* is found throughout the western United States as well as parts of Mexico and Canada. It is commonly found in the desert and prairie regions of British Columbia, Alberta, and Saskatchewan in Canada. In the United States, *Falco mexicanus* is found from North and South Dakota south to Texas, Arizona, and New Mexico. Sightings in Manitoba, Minnesota, Illinois, Iowa, and Indiana have been recorded as well.	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	Limited foraging habitat present.
American peregrine falcon *Falco peregrinus anatum*	FP	Found to occur in Arizona, Colorado, and Oklahoma.	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	Limited foraging habitat present.
Loggerhead Shrike *Lanius ludovicianus*	--/SSC	Distributed along southern Canada and the contiguous USA. There populations are declining and more reside in southern costal California.	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub & washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Limited foraging habitat present.
Bank swallow *Riparia riparia*	--/CT	Bank swallows, or sand martins as they are known in Europe and Asia, are one of the few small passerine birds that have an almost cosmopolitan distribution. They migrate between discrete breeding and wintering ranges. Bank swallow distribution in the breeding range is most limited by suitable nesting habitat. Winter distribution is influenced by appropriate foraging areas.	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Specific Plan Area does not provide suitable habitat.
Yellow Warbler *Setophaga petechia*	--/SSC	Across almost all of North America.	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	Appropriate habitat is present. This species has been observed within the Specific Plan Area.

SPECIES	*STATUS (FED/CA)*	*GEOGRAPHIC DISTRIBUTION*	*HABITAT REQUIREMENTS*	*POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA*
Least Bell's vireo *Vireo bellii pusillus*	FE/CE	Summer resident of southern California in low riparian in vicinity of water or in dry river bottoms.	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Specific Plan Area does not provide suitable habitat.
FISH				
Steelhead - South-central California coast DPS *Oncorhynchus mykiss irideus*	FT/--	This distinct population segment, or DPS, includes all naturally spawned populations of steelhead (and their progeny) in the Sacramento and San Joaquin Rivers and their tributaries, excluding steelhead from San Francisco Bay and San Pablo Bays and their tributaries.	Free of heavy sedimentation with adequate flow and cool, clear water. Gravel that is between 0.5 to 6.0 inches in diameter, dominated by 2 to 3-inch gravel. Escape cover such as logs, undercut banks, and deep pools for spawning adults.	Specific Plan Area does not provide suitable habitat.
Tidewater goby *Eucyclogobius newberryi*	FE/SSC	Is found primarily in waters of coastal lagoons, estuaries, and marshes. Tidewater gobies live only in California, and historically ranged from Tillas Slough (mouth of the Smith River, Del Norte County) to Agua Hedionda Lagoon (northern San Diego County).	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	Specific Plan Area does not provide suitable habitat.
Longfin smelt *Spirinchus thaleichthys*	FC/CT	Occurs in estuaries along the California coast. Adults concentrated in Suisun, San Pablo, and North San Francisco Bays. Prior to spawning, these fish aggregate in deepwater habitats available in the northern Delta, including, primarily, the channel habitats of Suisun Bay and the Sacramento River. Spawning occurs in fresh water on the San Joaquin River below Medford Island and on the Sacramento River below Rio Vista.	Euryhaline, nektonic & anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15-30 ppt, but can be found in completely freshwater to almost pure seawater.	Specific Plan Area does not provide suitable habitat.
MAMMALS				
Pallid Bat *Antrozous pallidus*	--/SSC	Associated with oak woodlands in coastal California.	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	The Specific Plan Area provides foraging habitat, and some limited roosting opportunities exist around the farmland residential complexes.
Townsend's big-eared bat *Corynorhinus townsendii*	--/SSC	Coastal regions from Del Norte County south to Santa Barbara County.	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	The Specific Plan Area provides foraging habitat, and some limited roosting opportunities exist around the farmland residential complexes.

SPECIES	*STATUS (FED/CA)*	*GEOGRAPHIC DISTRIBUTION*	*HABITAT REQUIREMENTS*	*POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA*
Hoary bat *Lasiurus cinereus*	--/--	Occur in all 50 states. Rare in the eastern United States and northern Rockies. Found mainly in the Pacific Northwest and California, Arizona, and New Mexico.	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	The Specific Plan Area provides foraging habitat, and some limited roosting opportunities exist around the farmland residential complexes.
Monterey Dusky-footed Woodrat *Neotoma fuscipes luciana*	--/SSC	Costal California from Monterey Bay to Morro Bay.	Forest habitats of moderate canopy and moderate to dense understory. Also in chaparral habitats. Nests constructed of grass, leaves, sticks, feathers, etc. Population may be limited by availability of nest materials.	Specific Plan Area does not provide suitable habitat.
Salinas harvest mouse *Reithrodontomys megalotis distichlis*	--/--	*Reithrodontomys megalotis* is found over a wide portion of the western United States of America and central Mexico. It is broadly distributed from the Great Lakes to the Pacific Coast. It occurs at elevations from Death Valley, California (below sea level), to 4000 m on the Popocatepetl and Orozaba volcanoes in Central Mexico.	Known only from the Monterey Bay region. Occurs in fresh and brackish water wetlands and probably in the adjacent uplands around the mouth of the Salinas River.	Specific Plan Area does not provide suitable habitat.
American badger *Taxidea taxus*	--/SSC	Badgers are found primarily in the Great Plains region of North America. Badgers occur north through the central western Canadian provinces, in appropriate habitat throughout the western United States, and south throughout the mountainous areas of Mexico. They have expanded their range since the turn of the 20th century and are now found as far east as Ontario, Canada.	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	The Specific Plan Area provides foraging habitat. There is no evidence that they occupy the Specific Plan Area.
REPTILES				
Southwestern pond turtle *Actinemys marmorata pallida*	--/SSC	Occurs from just south of San Francisco Bay to Baja California.	The turtles use their resident creeks, rivers, wetlands, lakes and ponds primarily for foraging for food, regulating their temperature, and for shelter to avoid predators. They use dry sunny basking sites for warming themselves such as rocks, logs, or thick floating vegetation.	Specific Plan Area does not provide suitable habitat.
Western pond turtle *Emys marmorata*	--/SSC	Occurs from the Oregon border of Del Norte and Siskiyou Counties south along the coast to San Francisco Bay, inland through the Sacramento Valley, and on the western slope of Sierra Nevada.	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Specific Plan Area does not provide suitable habitat.
Northern California legless lizard *Anniella pulchra*	--/--	California legless lizards are found in California and Mexico. They are found from western central California (San Joaquin and the coastal regions), through northwestern Baja California, and as far south as Colonia Guerrero, Mexico.	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	Specific Plan Area does not provide suitable habitat.

SPECIES	*STATUS (FED/CA)*	*GEOGRAPHIC DISTRIBUTION*	*HABITAT REQUIREMENTS*	*POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA*
Coast horned lizard *Phrynosoma blainvillii*	--/SSC	Found at elevations from sea level to 8,000 ft. (2,438 m).	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Specific Plan Area does not provide suitable habitat.
Two-striped gartersnake *Thamnophis hammondii*	--/SSC	Ranges continuously from near Salinas in Monterey County south along the coast mostly west of the south Coast Ranges, to southern California where it ranges east through the Transverse Ranges (and into the desert in Victorville) and south through the Peninsular Ranges into northern Baja California. Occurs in southern Baja California in isolated areas. Also occurs on Catalina Island.	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Specific Plan Area does not provide suitable habitat.

NOTES:

FEDERAL

E = ENDANGERED UNDER THE FEDERAL ENDANGERED SPECIES ACT.
T = THREATENED UNDER THE FEDERAL ENDANGERED SPECIES ACT.
PE = PROPOSED FOR ENDANGERED UNDER THE FEDERAL ENDANGERED SPECIES ACT.
PT = PROPOSED FOR THREATENED UNDER THE FEDERAL ENDANGERED SPECIES ACT.
C = CANDIDATE SPECIES FOR LISTING UNDER THE FEDERAL ENDANGERED SPECIES ACT.
D = DELISTED FROM FEDERAL LISTING STATUS.

STATE

E = ENDANGERED UNDER THE CALIFORNIA ENDANGERED SPECIES ACT.
T = THREATENED UNDER THE CALIFORNIA ENDANGERED SPECIES ACT.
C = CANDIDATE SPECIES FOR LISTING UNDER THE CALIFORNIA ENDANGERED SPECIES ACT.
FP = FULLY PROTECTED UNDER THE CALIFORNIA FISH AND GAME CODE.
SSC = SPECIES OF SPECIAL CONCERN IN CALIFORNIA.

3.2.2 REGULATORY SETTING

There are a number of regulatory agencies whose responsibility includes the oversight of the natural resources of the state and nation including the California Department of Fish and Wildlife (CDFW), USFWS, U.S. Army Corps of Engineers (USACE), and the Regional Water Quality Control Board (RWQCB). These agencies often respond to declines in the quantity of a particular habitat or plant or animal species by developing protective measures for those species or habitat type. The following is an overview of the federal, state and local regulations that are applicable to the proposed project.

FEDERAL

Federal Endangered Species Act

The Federal Endangered Species Act (FESA), passed in 1973, defines an endangered species as any species or subspecies that is in danger of extinction throughout all or a significant portion of its range. A threatened species is defined as any species or subspecies that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. Once a species is listed it is fully protected from a "take" unless a take permit is issued by the USFWS. A take is defined as the harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct, including modification of its habitat (16 USC 1532, 50 CFR 17.3). Proposed endangered or threatened species are those species for which a proposed regulation, but not a final rule, has been published in the Federal Register.

Migratory Bird Treaty Act

To kill, posses, or trade a migratory bird, bird part, nest, or egg is a violation of the Federal Migratory Bird Treaty Act (FMBTA: 16 U.S.C., §703, Supp. I, 1989), unless it is in accordance with the regulations that have been set forth by the Secretary of the Interior.

Federal Bald and Golden Eagle Protection Act

The Federal Bald and Golden Eagle Protection Act provide regulations to protect bald and golden eagles as well as their nests and eggs from willful damage or injury.

Clean Water Act – Section 404

Section 404 of the CWA regulates all discharges of dredged or fill material into waters of the U.S. Discharges of fill material includes the placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. §328.2(f)]. Waters of the U.S. include lakes, rivers, streams, intermittent drainages, mudflats, sandflats, wetlands, sloughs, and wet meadows. Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to

support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [33 C.F.R. §328.3(b)]. Waters of the U.S. exhibit a defined bed and bank and ordinary high-water mark (OHWM). The OHWM is defined by the USACE as "that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" [33 C.F.R. §328.3(e)].

Clean Water Act – Section 401

Section 401 of the CWA (33 U.S.C. 1341) requires an applicant who is seeking a 404 permit to first obtain a water quality certification from the RWQCB. To obtain the water quality certification, the CVRWQCB must indicate that the proposed fill would be consistent with the standards set forth by the state.

Rivers and Harbors Act of 1899

The Rivers and Harbors Act prohibits the obstruction or alteration of any navigable water of the United States. The Act requires authorization from the USACE for any excavation or deposition of materials into these waters or for any work that could affect the course, location, condition, or capacity of rivers or harbors.

STATE

Fish and Game Code §2050-2097 - California Endangered Species Act

The California Endangered Species Act (CESA) protects certain plant and animal species when they are of special ecological, educational, historical, recreational, aesthetic, economic, and scientific value to the people of the State. CESA established that it is State policy to conserve, protect, restore, and enhance endangered species and their habitats. CESA was expanded upon the original Native Plant Protection Act and enhanced legal protection for plants. To be consistent with Federal regulations, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" animals into the Act as threatened species, but did not do so for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Under State law, plant and animal species may be formally designated by official listing by the California Fish and Game Commission.

Fish and Game Code §1900-1913 California Native Plant Protection Act

In 1977 the State Legislature passed the Native Plant Protection Act (NPPA) in recognition of rare and endangered plants of the state. The intent of the law was to preserve, protect, and enhance endangered plants. The NPPA gave the California Fish and Game Commission the power to designate native plants as endangered or rare, and to require permits for collecting, transporting, or selling such plants. The NPPA includes provisions that prohibit the taking of plants designated as "rare" from the wild, and a salvage mandate for landowners, which requires notification of the CDFW 10 days in advance of approving a building site.

Fish and Game Code §3503, 3503.5, 3800 - Predatory Birds

Under the California Fish and Game Code, all predatory birds in the order Falconiformes or Strigiformes in California, generally called "raptors," are protected. The law indicates that it is unlawful to take, posses, or destroy the nest or eggs of any such bird unless it is in accordance with the code. Any activity that would cause a nest to be abandoned or cause a reduction or loss in a reproductive effort is considered a take. This generally includes construction activities.

Fish and Game Code §1601-1603 – Streambed Alteration

Under the California Fish and Game Code, CDFW has jurisdiction over any proposed activities that would divert or obstruct the natural flow or change the bed, channel, or bank of any lake or stream. Private landowners or project proponents must obtain a "Streambed Alteration Agreement" from CDFW prior to any alteration of a lake bed, stream channel, or their banks. Through this agreement, the CDFW may impose conditions to limit and fully mitigate impacts on fish and wildlife resources. These agreements are usually initiated through the local CDFW warden and will specify timing and construction conditions, including any mitigation necessary to protect fish and wildlife from impacts of the work.

Public Resources Code § 21000 - California Environmental Quality Act

CEQA identifies that a species that is not listed on the federal or state endangered species list may be considered rare or endangered if the species meets certain criteria. (CEQA Guidelines § 15380) Species that are not listed under FESA or CESA, but are otherwise eligible for listing (i.e. candidate, or proposed) may be protected by the local government until the opportunity to list the species arises for the responsible agency.

Species that may be considered for review are included on a list of "Species of Special Concern," developed by the CDFW. Additionally, the CNPS maintains a list of plant species native to California that have low populations, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. List 1A contains plants that are believed to be extinct. List 1B contains plants that are rare, threatened, or endangered in California and elsewhere. List 2 contains plants that are rare, threatened, or endangered in California, but more numerous elsewhere.

California Wetlands Conservation Policy

In August 1993, the Governor announced the "California Wetlands Conservation Policy." The goals of the policy are to establish a framework and strategy that will:

- Ensure no overall net loss and to achieve a long-term net gain in the quantity, quality, and permanence of wetland acreage and values in California in a manner that fosters creativity, stewardship, and respect for private property.
- Reduce procedural complexity in the administration of State and federal wetland conservation programs.
- Encourage partnerships to make landowner incentive programs and cooperative planning efforts the primary focus of wetland conservation and restoration.

The Governor also signed Executive Order W-59-93, which incorporates the goals and objectives contained in the new policy and directs the Resources Agency to establish an Interagency Task Force to direct and coordinate administration and implementation of the policy.

Natural Community Conservation Planning Act

The Natural Community Conservation Planning Act provides long-term protection of species and habitats through regional, multi-species planning before the special measures of the CESA become necessary.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act authorizes the State Water Resources Control Board (SWRCB) to regulate state water quality and protect beneficial uses.

Water Quality Control Plan for the Central Coastal Basin

The Water Quality Control Plan for the Central Coastal Basin (Basin Plan) includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term "water quality standards," as used in the Federal CWA, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards.

The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region's ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes, where they are known. For water bodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plan reflects, incorporates, and implements applicable portions of a number of national and statewide water quality plans and policies, including the California Water Code and the CWA.

LOCAL

City of Salinas General Plan

The Salinas General Plan establishes the following goals and policies directly related to biological resources:

CONSERVATION/OPEN SPACE ELEMENT

Goal COS-1: Promote a safe and adequate supply of water for community uses.

Policy COS-1.6: Enforce national (NPDES) requirements and participate in regional efforts to protect and enhance water quality.

Goal COS-5: Protect and enhance the remaining identified and significant ecological and biological resources within and surrounding the community.

Policy COS-5.1: Protect and enhance creek corridors, river corridors, the reclamation ditch, sloughs, wetlands, hillsides and other potentially significant biological resources for their value in providing visual amenity, flood protection, habitat for wildlife and recreational opportunities.

Policy COS-5.2: Explore with Monterey County the potential for creation of a Gabilan Creek Regional Park extending along the creek from the urban edge to the headwaters in the Gabilan Mountains.

Goal COS-7: Provide, develop, and maintain ample park and recreational facilities that offer a variety of recreational activities.

Policy COS-7.2: Maximize the use of built and natural features to develop a citywide network of parks and open spaces with Carr Lake, Gabilan Creek and the Sherwood Park/Rodeo Grounds complex as essential elements of the open space network.

Policy COS-7.11: Develop and maintain an integrated system of open-space corridors and trails along utility easements, power-transmission-line rights-of-way, the reclamation ditch, stream banks, drainage-ways, slopes, and other natural features.

Policy COS-7.12: Link activity centers, recreational opportunities, transit nodes and other services to the integrated trails network.

City of Salinas Municipal Code

Chapter 35, Trees and Shrubs, of the Salinas Municipal Code protects heritage and/or landmark trees through permit requirements. Section 35-9 outlines the permit requirements for trimming, pruning, planting, removing, or otherwise interfering with any tree, shrub, or plant upon any street, parkway, or alley in the City. Section 35-18 prohibits the removal of heritage or landmark oak trees from City property except with the prior written approval by the Director. The following definitions are outlined in Section 35-1 of the City Municipal Code:

"Heritage and/or landmark trees" are defined as any oak tree which is twenty-four inches or more in diameter when measured two feet above the ground, or oak trees which are visually significant, historically significant, or exemplary in their species.

"Street tree" means any woody perennial plant having a single main axis or stern commonly achieving ten feet in height and capable of being shaped and pruned to develop a branch-free trunk at least nine feet in height.

"Street trees," "shrubs" or "plants" means any tree, shrub, or plant, in any street, park or public place, in the city.

3.2.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on biological resources if it will:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

IMPACTS AND MITIGATION

Impact 3.2-1: The proposed project has the potential to have direct or indirect effects on special-status invertebrate species (Less than Significant)

There are numerous special-status invertebrates that are documented within region, but none are documented within the Specific Plan Area or vicinity. Based on field surveys, habitat conditions, and records searches, there are no invertebrate species that have the potential to be present within the Specific Plan Area. Therefore, the proposed project would have a ***less than significant*** impact on special-status invertebrate species.

Impact 3.2-2: The proposed project has the potential to have direct or indirect effects on special-status reptile and amphibian species (Less than Significant with Mitigation)

There are numerous special-status amphibian and reptile that are documented within the region. The Specific Plan Area was assessed for habitat to support special-status amphibians/reptiles. Based on field surveys and records searches, three species warranted a more detailed evaluation within this EIR due to the habitat conditions. This includes: California tiger salamander (CTS) (*Ambystoma californiense*), California red-legged frog (CRLF) (*Rana draytonii*), and foothill yellow legged frog (FYLF) (*Rana boylii*).

California Tiger Salamander (CTS) (*Ambystoma californiense*): The federally and state-listed Threatened CTS is a large terrestrial salamander. It occurs in central California from the Sacramento Valley to the south-central San Joaquin Valley, and in the surrounding foothills of both the Coast Ranges and the Sierra Nevada Mountains. CTS are also recorded from the San Francisco Bay region, Sonoma County, the Monterey Bay region, and the valleys and foothills of San Luis Obispo and Santa Barbara counties.

CTS breed in temporary wetland pools, such as vernal pools, and other seasonal wetland bodies where ponded water is present for a minimum of three to four months, extending into the early spring. Such ponds and temporary wetlands provide necessary breeding and larval-stage habitat for the species. Adults spend most of the year in aestivation, underground in the burrows of small mammals, such as the California ground squirrel and/or Botta's pocket gopher, or within other suitable subterranean retreats. They emerge at night during winter rain events for brief periods to breed (Trenham et al. 2001). Aquatic juveniles (larvae) are mostly herbivorous (Stebbins 1985). CTS normally begin to reproduce after three to five years.

There are CNDDB records from 2007 and 2008 of CTS located in an agricultural basin immediately adjacent to the Specific Plan Area. The basin was estimated to be five feet deep and approximately 0.25 acres in size located on the east side of Nativdad Road, approximately 0.4 miles north of East Boronda Road. The habitat was described as "substantial submergent and emergent vegetation; basin is surrounded by active agricultural product in in all directions." There were 30 large observed on September 5, 2007. Twenty-two larval tail clippings were collected for genetic testing by the UC Davis Schaffer Laboratory. The results of the testing indicated that the larvae are hybrids.

This documented occurrence is a metapopulation of hybrid tiger salamanders. A metapopulation is a population of populations, or a group of groups, that is made up of the same species. Each subpopulation, or subgroup, is separated from all other subpopulations, but movement of individuals from one population to another occurs regularly. This species is known to also occur within other areas east and west of the Specific Plan Area in the Future Growth Area.

It is anticipated that CTS adults will disperse at night up to 1.3 miles to refuge sites. The entire Specific Plan Area is within the 1.3 miles migration distance for CTS. While the Specific Plan Area is largely agricultural with a high level of ground disturbance, there are small microhabitats, some of

which can provide habitat for CTS. The microhabitats include: farmland fringe (or edge), irrigation ditch (1.13 acres), roadside/ditch bank (3.26 acres) and areas farmland residence/structures.

Dirt Road: The dirt roads lack quality upland habitat. The dirt roads are not refuge habitat for this species, although CTS may travel across the dirt roads in route to their refuge sites.

Paved Road: The paved roads lack upland habitat. The paved roads are not refuge habitat for this species, although CTS may travel across the paved roads in route to their refuge sites.

Tilled Farmland: The tilled farmland lacks quality upland habitat given that it is actively disced/disturbed. This area ground squirrels and burrows. Burrows are a critical component in the lifecycle of the California tiger salamander, and the presence of a breeding pond nearby. The agricultural fields is not refuge habitat for this species, although CTS may travel through the tilled farmland in route to their refuge sites.

Farmland Fringe: There is land along the edge of the tilled farmland that is not cultivated and is less disturbed when compared to the Tilled Farmland. This area is generally between the dirt roads and the tilled farmland and is characterized/labeled as Farmland Fringe. The Farmland Fringe provides a higher quality upland habitat for CTS compared to the tilled farmland because it provides opportunities for refugia given the less frequent disturbance. This area does have some disturbance during tilling, but is not actively planted each year.

Irrigation Ditch: The network of irrigation ditches throughout the Specific Plan Area provide some aquatic linkage and potential movement corridors for CTS. The margins of the ditches provide some opportunities for refugia given that they are not disced/disturbed as frequently as the cultivated areas. There is potential refugia habitat in crevices, and/or debris. There have not been any observations of CTS in the Specific Plan Area, including these ditches and the upland margins; however, detection is difficult without seasonal trapping efforts.

Roadside Ditch: The roadside ditches located along Boronda Road and San Juan Grade Road provide some aquatic linkage and potential movement corridors for CTS. The margins of the ditches provide some opportunities for refugia given that they are not disced/disturbed as frequently as the cultivated areas. There is potential refugia habitat in crevices, and/or debris. There have not been any observations of CTS in the Specific Plan Area, including these ditches and the upland margins; however, detection is difficult without seasonal trapping efforts.

Farmland Residence: The farmland residences (complexes) located along San Juan Grade Road and Natividad Road contain a residences, barns and outbuildings, landscaping, farm tractor and implement storage, dirt roads, and parking areas. Within these areas there are locations for refugia (debris, burrows, crevices, barns, sheds, etc.). The farmland residences along San Juan Grade Road provides lower quality habitat due to the distance from the breeding site, although they provide some opportunity for refuge given that they are within the 1.3-mile dispersal distance. The farmland residence along Natividad is immediately adjacent to the breeding site and provides a possibility for refuge habitat for CTS. While the farmland residence is not a natural

undisturbed site, CTS have been known to find refuge in the landscaping areas, under debris, burrows, crevices, barns, sheds, etc. surrounding a farmland residence.

Conclusion: As previously noted, there are numerous locations for refugia within the 1.3-mile radius of the CTS breeding basin (debris, burrows, crevices, barns, sheds, etc.). Higher quality upland habitat is found to the east; however, the Specific Plan Area cannot be completely discounted as having potential refuge sites. It is noted that there is not any known CTS taking refuge in the Specific Plan Area during their estivation period. It is also theoretically possible that a breeding CTS would emerge from the breeding basin and migrate west of Natividad Road to find refugia in the Specific Plan Area. The areas with potential upland habitat in the Specific Plan Area includes the farmland fringe, irrigation ditch, roadside ditch, and farmland residence. The paved roads, dirt roads, and tilled farmland provide limited habitat because of the frequency of disturbance in these areas. Given that the Specific Plan Area is within the 1.3-mile migration radius, and there is potential aquatic breeding and upland habitat, the proposed project will affect this breeding population of CTS.

It is noted that this population has been genetically evaluated and has been determined to be a hybrid population which does not receive the same protections as a distinct population segment (DPS). As of the writing of this EIR, the USFWS and CDFW has not officially listed this metapopulation. While it is anticipated that the proposed project would eliminate all potential for refuge in the Specific Plan Area, is not ruled a significant impact because this metapopulation is not protected. Regardless, there is the potential for a species status to change at some future time and present a new impact that could not have been determined at this time. The following mitigation measures are presented to ensure a final concurrence is obtained from the regulatory agencies to ensure that there is no illegal take for CTS. Additionally, measures are presented to avoid and minimize impacts to CTS to the extent feasible. With implementation of the following measures, this potential impact is reduced to a ***less than significant*** level.

MITIGATION MEASURES

Mitigation Measure 3.2-1*: Prior to any construction activities, the project applicant shall consult with the USFWS and CDFW for concurrence and a final confirmation that a take permit is not necessary for impacts to the hybrid population of California tiger salamander located along Natividad Road. The regulatory agency concurrence confirmation shall be provided to the City of Salinas for the project file. If the status of this metapopulation were to change and become protected prior to construction, or the regulatory agencies do not concur that the metapopulation does not require a take permit, then the project applicant shall initiate a consultation with the agencies and obtain the appropriate take permits.*

Mitigation Measure 3.2-2*: To avoid and minimize impacts to California tiger salamander to the extent feasible, the proposed project activities shall be compliant with the following Avoidance and Minimization Measures during Construction Activities:*

a. *Prior to excavation work or other ground disturbance, a biologist(s) will conduct environmental education training for all construction personnel covering the California*

tiger salamander, the importance of avoiding adverse effects to the species. New personnel who are added to the project after the training is first conducted also will be required to be trained.

b. *The biologist(s) will oversee the hand excavation of any burrows located in suitable habitat that are within the project footprint (Farmland Fringe, Irrigation Ditch, Roadside Ditch, and Farmland Residence). These excavations will be performed carefully using hand-trowels and spades. Burrows will be excavated to the terminus of the tunnels, or to where the burrow is less than or equal to 0.5 inch in diameter.*
c. *If ground disturbing activities in suitable habitat are projected to extend beyond the first rain of the rainy season, the applicant will erect drift fencing around the work areas, prior to commencing work, to prevent California tiger salamanders from entering these sites. Drift fencing will be installed and inspected by the biologist(s) no less than 72 hours prior to the first rain event of the rainy season. If weather conditions necessitate the installation of drift fencing, the approved biologist(s) will oversee the installation of pit traps to capture California tiger salamanders migrating during the rain events. The biologist(s) will check pit traps twice daily, once in the morning prior to the start of construction and once at the end of the work day.*
d. *Any California tiger salamanders captured in pit traps or uncovered in burrows will be transferred immediately to a site designated by the USFWS and CDFW. Transported animals must be kept cool and moist.*
e. *A post-construction report detailing compliance with the avoidance/minimization measures will be provided to the USFWS and CDFW within 90 calendar days of completion of the project. The report will include:*
    i. *Dates of project groundbreaking and completion.*
    ii. *Information concerning the success of the project in meeting minimization measures, such as the capture and offsite transport of California tiger salamanders.*
    iii. *An explanation of failure to meet such measures, if any.*
    iv. *Known project effects on the California tiger salamander.*
    v. *Observed incidences of injury to or mortality of the species.*
    vi. *Any other relevant information.*

California Red-legged Frog (CRLF) (*Rana draytonii*): The federally-listed Threatened and California Species of Special Concern CRLF occurs in lowlands and foothills primarily in perennial or ephemeral ponds, pools, and streams where water remains long enough (14 to 28 weeks) for breeding and metamorphosis of tadpoles. Specific breeding sites include streams, creeks, ponds, marshes, sag ponds, deep pools, backwater areas, dune ponds, lagoons, and estuaries. Habitats with the highest densities of CRLF often contain dense emergent or shoreline riparian vegetation closely associated with fairly shallow (< 0.5 meter) to deep (> 0.5 meter), still or slow-moving water (USFWS 2002). CRLF may disperse from their aquatic breeding habitats to upland habitats during the dry season. They prefer upland habitats that provide moisture to prevent desiccation and protection from predators including downed logs, woody vegetation, boulders, moist leaf litter, or other refugia during the dry season. When there is sufficient water at their breeding

location, they may remain in aquatic habitats year-round instead of moving to adjacent uplands. During wet seasons, frogs can move long distances between habitats, traversing upland areas or ephemeral drainages. Dispersal distances are typically less than 0.5 km (0.3 mile), with a few individuals moving 2.0 to 3.6 kilometers (1.2 to 2.2 miles). Seeps and springs in open grasslands can function as foraging habitat or refugia for wandering frogs (Jennings and Hayes 1994).

This species was detected along Old Stage Road and the Natividad Creek drainage, which is approximately 1.8 miles from the eastern boundary of the Specific Plan Area. There are also numerous documented occurrences of CRLF, including breeding sites within five miles of the Specific Plan Area. CRLF may disperse through any of the drainages in the vicinity. While the Specific Plan Area does not provide high quality habitat for CRLF, the network of irrigation ditches presents some habitat opportunities for this species.

Conclusion: As previously noted, there are numerous documented occurrences of CRLF in the vicinity of the Specific Plan Area. Higher quality upland and aquatic habitat is found to the east; however, the Specific Plan Area cannot be completely discounted as having potential habitat within the drainage features (i.e. ditches). It is noted that there is not any known CRLF within the Specific Plan Area. The areas with potential upland habitat in the Specific Plan Area includes the irrigation ditches and roadside ditches. The paved roads, dirt roads, tilled farmland, farmland fringe, and farmland residences provide very limited to no habitat. The proposed project would eliminate all potential use of the land within the Specific Plan Area. The following mitigation measures are presented to ensure a final concurrence is obtained from the regulatory agencies to ensure that there is no illegal take for CRLF. Additionally, measures are presented to avoid and minimize impacts to CRLF to the extent feasible. With implementation of the following measures, this potential impact is reduced to a ***less than significant*** level.

MITIGATION MEASURES

Mitigation Measure 3.2-3*: Prior to any construction activities, the project applicant shall consult with the USFWS for concurrence and a final confirmation that a take permit is not necessary for impacts to the California red-legged frog that is documented in the region, and has the potential to utilize the surrounding drainages. The regulatory agency concurrence confirmation shall be provided to the City of Salinas for the project file. If the regulatory agency do not concur that the project does not require a take permit, then the project applicant shall initiate a consultation with the agency and obtain the appropriate take permit.*

Mitigation Measure 3.2-4*: To avoid and minimize impacts to CRLF to the extent feasible, the proposed project activities shall be compliant with the following Avoidance and Minimization Measures during Construction Activities:*

a. *Prior to excavation work or other ground disturbance, a biologist(s) will conduct environmental education training for all construction personnel covering the California red-legged frog, the importance of avoiding adverse effects to the species. New personnel who are added to the project after the training is first conducted also will be required to be trained.*

b. *The biologist(s) will monitor construction activities located in suitable habitat that is within the project footprint (Irrigation Ditch, Roadside Ditch).*
c. *Prior to excavation work or other ground disturbance, a biologist(s) will conduct environmental education training for all construction personnel covering the California red-legged frog, the importance of avoiding adverse effects to the species. New personnel who are added to the project after the training is first conducted also will be required to be trained.*
d. *The applicant will erect drift fencing around the work areas, prior to commencing work, to prevent California red-legged frog from entering the construction site. Drift fencing will be installed and inspected by the biologist(s).*
e. *A post-construction report detailing compliance with the avoidance/minimization measures will be provided to the U.S. Fish and Wildlife Service within 90 calendar days of completion of the project. The report will include:*
    vii. *Dates of project groundbreaking and completion.*
    viii. *Information concerning the success of the project in meeting minimization measures, such as the capture and offsite transport of.*
    ix. *An explanation of failure to meet such measures, if any.*
    x. *Known project effects on the California red-legged frog.*
    xi. *Observed incidences of injury to or mortality of the species.*
    xii. *Any other relevant information.*

If proposed construction activities may result in the "take" (harass, harm, pursue, wound, kill, trap, or capture) of California red-legged frog or California tiger salamander, the project proponent shall obtain state and federal Incidental Take Permits, and comply with all stipulated conditions to protect special-status amphibians.

Foothill Yellow Legged Frog (FYLF) (*Rana boylii*): The FYLF is state candidate for listing as Threatened. They occur in partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. They need at least some cobble-sized substrate for egg-laying and at least 15 weeks to attain metamorphosis. Adults often bask on exposed rock surfaces near streams. When disturbed, they dive into the water and take refuge under submerged rocks or sediments. During periods of inactivity, especially during cold weather, individuals seek cover under rocks in the streams or on shore within a few meters of water. Egg clusters are attached to gravel or rocks in moving water near stream margins. Unlike most other ranid frogs in California, this species is rarely encountered (even on rainy nights) far from permanent water. Tadpoles require water for at least three or four months while completing their aquatic development. Significant seasonal movements or migrations from breeding areas have not been reported. Normal home ranges are probably less than 10 m (33 ft) in the longest dimension. Occasional long-distance movements (up to 50 m) (165 ft) may occur during periods with high water conditions. Breeding and egg laying usually await the end of spring flooding and may commence any time from mid-March to May, depending on local water conditions. The breeding season at any locality is usually about two weeks for most populations. Females deposit eggs in clusters of 200 to 300 (range 100 to 1000). They hatch in about five days. Tadpoles reach maximum sizes of 50 to 55 mm (2.2 in) and transform in three to four months.

Conclusion: The FYLF is not documented in the vicinity of the Specific Plan Area. The ditches within the Specific Plan Area provide some limited habitat for FYLF. This species is known to occur in aquatic habitats, such as creeks or rivers in woodland, forest, mixed chaparral, and wet meadow habitats with rock and gravel substrate and low overhanging vegetation along the edge. There are usually found near riffles with rocks and sunny banks nearby. The conditions of the Plan Area, include the drainages, are not ideal for this species and they are presumed absent. Implementation of the proposed project would have a ***less than significant*** impact relative to this species.

Impact 3.2-3: The proposed project has the potential to have direct or indirect effects on special-status bird species (Less than Significant with Mitigation)

There are numerous special-status birds that are documented within the region. The Specific Plan Area was assessed for habitat to support special-status birds. Field surveys revealed the presence of two special-status birds: yellow warbler (*Setophaga petechial*), and California horned lark (*Eremophila alpestris actia*). While other special-status birds were not observed on-site during field surveys, it is highly likely that they could regularly use or pass through the Specific Plan Area given their high mobility.

Nesting Raptors (Birds of Prey): All raptors (owls, hawks, eagles, falcons), including common species, and their nests, are protected from take pursuant to the Fish and Game Code of California Section 3503.5, and the federal MBTA, among other federal and state regulations. Powerlines and trees located in the region represent potentially suitable nesting habitat for a variety of special-status raptors, including white-tailed kite *(Elanus leucurus*), Swainson's hawk *(Buteo swainsoni*), and Cooper's hawk *(Accipiter cooperii*). The agricultural land in the Specific Plan Area and vicinity represents potentially suitable nesting habitat for the ground-nesting northern harrier *(Circus cyaneus*) and burrowing owl *(Athene cunicularia*) and it also serves as foraging habitat for a wide variety of raptors including: Prairie falcon (*Falco mexicanus*), ferruginous hawk *(Buteo rega*), golden eagle *(Aquila chrysaetos*), merlin *(Falco columbarius*). In general, raptor nesting occurs from late February and early March through late July and early August, depending on various environmental conditions. In addition to the species described above, common raptors such as red-tailed hawk *(Buteo jamaicensis)* and great horned owl *(Bubo virginianus),* among others, may nest in or adjacent to the Specific Plan Area. The field surveys over the past decade, including the latest 2016 survey, did not reveal any evidence of raptor nesting.

Shore/Water Birds: Colonial nesting water bird rookery sites of double-crested cormorant *(Phalacrocorax auritus),* great blue heron *(Ardea herodias),* great egret *(Ardea alba),* snowy egret *(Egretta thula),* and black-crowned night heron *(Nycticorax nycticorax),* among others, are considered sensitive species. These species are not formally listed and protected pursuant to either the state or federal Endangered Species Acts but are of stated interest to CDFW and are protected by the MBTA. The irrigation ditches present potentially suitable habitat for these species, although rookeries of these species have not been previously reported in this area nor were they observed during any of the field surveys. In general, the nesting season for these colonial nesters is from March through July, but may vary depending on weather conditions or

disturbances. The agricultural area throughout the Specific Plan Area provides foraging habitat for these colonial nesters. Although these species were not observed during any of the field surveys, they are common in the region and may use the Specific Plan Area for foraging from time to time.

Nesting Passerine Birds (songbirds): There is limited nesting habitat present in the Specific Plan Area for songbirds. The agricultural area throughout the Specific Plan Area provides foraging habitat for nesting passerine birds including: yellow warbler (*Setophaga petechial*), Loggerhead Shrike (*Lanius ludovicianus*), California horned lark (*Eremophila alpestris actia*). The development of the Specific Plan Area would remove potential nesting habitat along the ditches and foraging habitat throughout the area.

Conclusion: There are very few trees suitable for nesting within the Specific Plan Area. All trees are associated with the farm residence complexes located along Natividad Road and San Juan Grade Road. There was no evidence of nesting in the on-site trees during any of the past field surveys. There are also powerlines located along Natividad Road, Rogge Road, portions of San Juan Grade Road, and various dirt farm roads through the Specific Plan Area. There were no nests observed in the powerlines/poles.

Construction activities in the Specific Plan Area would create temporary sources of noise and light that could affect nesting songbirds if they are located adjacent to the Specific Plan Area in the future. The ongoing activities associated with the operational phase (i.e., human and/or domesticated animal presence, light, noise, etc.) could disrupt nesting birds if they are located adjacent to the Specific Plan Area in the future.

The following mitigation measure requires a preconstruction survey of the Specific Plan Area and immediate vicinity prior to construction. If nesting birds are found, an appropriate buffer would be developed around active nests as deemed appropriate in coordination with the CDFW to ensure that the nesting birds are not disrupted during the breeding season. Implementation of the proposed project, with the following mitigation measure, would ensure that potential impacts to special-status nesting birds are reduced to a ***less than significant*** level.

MITIGATION MEASURES

Mitigation Measure 3.2-5: *If construction activities occur during the avian breeding season (February 15 – September 15) then the project proponent shall conduct pre-construction surveys to prevent impacts to nesting birds. No more than 15 days prior to the start of construction a bird survey shall be conducted by a qualified biologist to identify any active nests within the Specific Plan Area. If construction stops for a period of 15 days or more during the avian breeding season than an additional bird survey shall be conducted. The biologist will conduct a survey in the Specific Plan Area for all special-status birds protected by the federal and state ESA, MBTA and CFGC. The biologist shall map all nests that are within, and visible from, the Specific Plan Area. If nests are identified, the biologist shall develop buffer zones around active nests as deemed appropriate in coordination with the CDFW. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored at least twice per week and a report submitted to the City and CDFW monthly.*

Impact 3.2-4: The proposed project has the potential to have direct or indirect effects on special-status fish species (Less than Significant)

There are numerous special-status fish that are documented within region, but none are documented within the Specific Plan Area or vicinity. Based on field surveys, habitat conditions, and records searches, there are no fish species that have the potential to be present within the Specific Plan Area. Therefore, the proposed project would have a ***less than significant*** impact on special-status fish species.

Impact 3.2-5: The proposed project has the potential to have direct or indirect effects on special-status mammal species (Less than Significant with Mitigation)

There are numerous special-status mammals that are documented within the region, but none are documented in the Specific Plan Area or the general vicinity. The Specific Plan Area was assessed for habitat to support special-status mammals and based on field surveys and records searches, two warranted a more detailed evaluation within this EIR due to the habitat conditions. This includes: Monterey dusky-footed woodrat (*Neotoma fuscipes Luciana*), and protected bats.

Monterey Dusky-Footed Woodrat (*Neotoma fuscipes luciana*). The Monterey dusky-footed woodrat is a California Species of Special Concern that occurs in a variety of woodland and scrub habitats in Monterey County. Dusky-footed woodrats occur in riparian and oak woodland forests or thick chaparral habitat. Dusky-footed woodrats build large, complex nests of sticks and other woody debris. Nests are typically located near the bases of trees or shrubs, under snags, under dense brush, in the lowest branches of trees, and are often found within riparian areas. Dusky-footed woodrats favor dense canopy cover and areas with poison oak. The breeding season generally begins in February and continues through September, and females have a single brood per year. This species may occur within riparian vegetation found in the region, most notably along Gabilian Creek and Natividad Creek located to the east; however, appropriate habitat is not present within the Specific Plan Area. Implementation of the proposed project would have a ***less than significant*** impact on this species.

Special-status bats: The Specific Plan Area provides potential habitat for several special-status bats, including: Mexican free-tailed bat (*Tadarida brasiliensis),* California mastiff bat (*Eumops perotis californicus*), big brown bat (*Eptesicus fuscus),* Hoary bat (*Lasiurus cinereus),* spotted bat (*Euderma maculatum),* Townsend's big-eared bat (*Corynorhinus townsendii),* pallid bat (*Antrozous pallidus*), western pipistrelle (*Pipistrellus Hesperus),* small-footed myotis/bat (*Myotis ciliolabrum*), long-eared myotis/bat (*Myotis evotis*), California myotis (*Myotis californicus),* long-legged myotis/bat (*Myotis volans*), Yuma myotis/bat (*Myotis yumanensis*), and little brown bat *(Myotis lucifugus).* These species are not federal or state listed; however, most of them are considered California Species of Special Concern and/or are tracked by the CNDDB. Bats are found in a variety of habitats in the region, including buildings, bridges, mines, caves, tree cavities, under bark or rocks, etc. There is the potential for bats to roost in the two on-site farmland residence complexes along San Juan Grade Road, and/or the complexes located along Natividad Road. There is no evidence that bats are present in these locations at this time; however, they can become occupied

at some future date. The following mitigation measure is presented to ensure appropriate measures are taken to avoid and minimize impacts to bats to the extent feasible. With implementation of the following measure, this potential impact is reduced to a ***less than significant*** level.

MITIGATION MEASURES

Mitigation Measure 3.2-6: *Fifteen days prior to construction activities within 200 feet of the residential complexes located along Natividad Road and San Juan Grade Road, the project applicant shall retain a biologist to perform a preconstruction survey for roosting special-status bats. The survey shall include a minimum of one daytime and one evening survey. The survey shall cover the trees, structures, and debris located within these complexes. If roosting activity is observed, removal of the tree or building shall be avoided if possible, during the roosting season. If avoidance is not feasible, a qualified biologist shall coordinate with the California Department of Fish and Wildlife to devise a strategy to safely evict the individuals or colonies.*

Impact 3.2-6: The proposed project has the potential to have direct or indirect effects on candidate, sensitive, or special-status plant species (Less than Significant)

The records search identified numerous special-status plants located within the region. Field surveys and habitat evaluations were performed in 2004 by Biotic Resources Group: March (26th and 31st), April (14th and 30th), May (17th), June (17th), July (26th). Additional field surveys were performed by De Novo Planning Group in 2015 September (11th) and in 2016 (April 18th). The collection of field surveys included surveys that coincided with the blooming period for special many status plants known to occur within the region. The conditions of the Specific Plan Area are highly disturbed due to the active agricultural operations. No special-status plants were observed within the Specific Plan Area during field surveys. Implementation of the proposed project will have a ***less than significant*** impact on candidate, sensitive, or special-status plants.

Impact 3.2-7: The proposed project has the potential to have direct or indirect effects on protected wetlands and jurisdictional waters (Less than Significant with Mitigation)

The Specific Plan Area does not contain any natural hydrologic features. During the previous surveys it was noted that there was a dry pond located near the intersection of Natividad Road and Rogge Road. This area was a man-made agricultural irrigation basin. The most recent surveys show that this dry pond is no longer present. Aerial photos show that the dry pond was converted back to agricultural use sometime around 2004 to 2005. This area has been farmed ever since.

The Specific Plan Area contains an internal network of agricultural ditches along the margins of the farm fields. These areas were mostly void of vegetation during the field surveys of September 2015 and April 2016. Farmworkers indicated that the ditches are regularly maintained to control/collect irrigation runoff from the fields. These features are manmade and are fed only by local irrigation water during the irrigation season or rainfall during the winter/spring season.

The Specific Plan Area contains a roadside ditch located along the east side of San Juan Grade Road. The ditch was constructed to support agricultural operations, and drains agricultural runoff into the existing City storm water drainage system. The ditch is approximately six feet in width and three feet in depth. The ditch drains into a culvert in San Juan Grade Road and ultimately into the Santa Rita Creek. Santa Rita Creek flows west away from the city and enters the Reclamation Ditch east of SR 183 just over one-mile south of Castroville.

The Specific Plan Area also contains a roadside ditch located along the north side of East Boronda Road. The ditch was constructed to support agricultural operations, and drains agricultural runoff from most of the Specific Plan Area into the existing City storm water drainage system. The ditches range from five to nine feet in width from top of bank to top of bank, and range from 1.5 to three feet in depth. The total length of drainage ditch is approximately 6,618 feet. This roadside ditch drains into two inlets that are connected to the City's storm water drainage system: one is located on the north side of the intersection of Dartmouth Way and East Boronda Road, and another is located on the north side of the intersection of McKinnon Street and East Boronda Road. After entering the City's storm water drainage system, the water intermixes with municipal runoff and flows through approximately 3.22 miles of underground storm drain pipe and through three detention basin facilities: McKinnon Park, Northgate Park, and Westridge Center. The water then flows into a detention area on the southwest side of the City known as Markeley Swamp. This area is comprised of low-lying agricultural fields that are actively farmed during most of the year, though occasionally the fields are inundated with excess storm water. From Markeley Swamp it enters an open flow channel connecting to the Reclamation Ditch system, which ultimately connects to Monterey Bay at Moss Landing Harbor.

The USACE has regulatory responsibility for navigable waters as well as "all other waters such as...streams ...wetlands...and natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce" (33 CFR 323.2) under Section 404 of the CWA. A formal jurisdictional determination must be made by the USACE relative to the protected wetlands and jurisdictional waters within the Specific Plan Area. The agricultural irrigation ditches are manmade and believed to solely function to drain upland agricultural runoff. As such, they are expected to be exempted from the USACE jurisdiction under the Irrigation Ditch Exemption pursuant to Federal Regulations (33 CFR 323.4(a)(3)). However, a final determination must be made by the USACE prior to any filling of these ditches for urban use.

It is noted that the City of Salinas and their consultants have had preliminary discussions with the USACE in coordination with the East Boronda Road Widening Project. Through that consultation, the USACE has indicated that they intend to exert their jurisdiction over the roadside ditch located along the north side of East Boronda Road. This road widening project is being led by the City of Salinas, and it is anticipated that the City and their consultants will pursue a 404 permit through the Nationwide Permit process (i.e. NWP 14 for linear transportation projects).

A portion of the East Boronda Road widening project is located along the southern boundary of the Plan Area. The timing of that road widening project will likely occur prior to the WASP project, so it is anticipated that any fill activities in the ditch would be permitted through the East Boronda Road widening project. If this proves to be the case, then upon completion of that project the hydrology would change from an open roadside ditch to and underground pipe. If the WASP

project moved forward prior to the East Boronda road widening project, then a permit would be required prior to any fill activities in this roadside ditch.

Given that the USACE intends to exert their jurisdiction over the East Boronda roadside ditch, it is anticipated that the roadside ditch located along the east side of San Juan Grade Road would also be jurisdictional and any fill activities would be subject to a 404 permit. The type of 404 permit would be dependent on several factors and would be determined in consultation with the USACE.

Implementation of the following mitigation measure would ensure that there is no fill, or hydrologic interruption, to a jurisdictional facility, without an appropriate authorization from the regulatory agencies (USACE, RWQCB, and CDFW). With implementation of the following measure, the impact would be ***less than significant***.

MITIGATION MEASURES

Mitigation Measure 3.2-7*: Prior to any construction activities that would disturb the irrigation ditches and/or roadside ditches, the project applicant shall obtain a jurisdictional determination from the USACE and CDFW. If these regulatory agencies concur that these facilities are exempt, then no further mitigation is necessary. If it is determined that these facilities are not exempt, authorization for fill from the regulatory agencies (USACE-404 permit, RWQCB-401 certification, 1600 Streambed Alteration Agreement) will be necessary and a permit shall be adhered to throughout the construction phase.*

Impact 3.2-8: The proposed project has the potential to have direct or indirect effects on riparian habitat or sensitive natural communities (Less than Significant)

The records search and field surveys did not reveal the presence of any riparian habitat or sensitive natural communities within the Specific Plan Area. The conditions of the Specific Plan Area are highly disturbed due to the active agricultural operations. Implementation of the proposed project will have a ***less than significant*** impact on riparian habitat or sensitive natural communities.

Impact 3.2-9: The proposed project has the potential to interfere with the movement of native fish or wildlife species or with established wildlife corridors, or impede the use of native wildlife nursery sites (Significant and Unavoidable)

Wildlife movement includes migration (i.e., usually movement one way per season), inter-population movement (i.e., long-term dispersal and genetic flow), and small travel pathways (i.e., daily movement within an animal's territory). While small travel pathways usually facilitate movement for daily home range activities, such as foraging or escape from predators, they also provide connection between outlying populations and the main populations, permitting an increase in gene flow among populations. These habitat linkages can extend for miles and occur on a large scale throughout the greater region. Habitat linkages facilitate movement between populations located in discrete locales and populations located within larger habitat areas.

Impacts from development, such as habitat fragmentation and/or isolation, and the creation of impassable barriers can cause a significant impact to wildlife corridors. Depending on the organism and its needs, movement corridors can either be continuous or discontinuous patches of suitable habitat. Preserving expanses of open space that are connected may enable species utilizing these areas as foraging or breeding habitat to persist.

The Specific Plan Area is used predominantly for active agricultural production, which generally prohibits most overland wildlife movement due to the lack of suitable vegetative cover. The exception is the irrigation and roadside ditches that drain irrigation runoff. This network of irrigation ditches throughout the Specific Plan Area provides some aquatic linkage and potential movement corridors for special-status species documented in the vicinity, including CTS and CRLF. The roadside ditches located along Boronda Road and San Juan Grade Road also provide some aquatic linkage and potential movement corridors for CTS. The margins of the ditches provide some opportunities for refugia given that they are not disced/disturbed as frequently as the cultivated areas. There is potential refugia habitat in crevices, and/or debris. There have not been any observations of these species in the Specific Plan Area; however, detection is difficult without seasonal trapping efforts.

Development of the proposed project would eliminate any movement habitat through the Specific Plan Area, along with any upland habitat adjacent to the movement corridors. This is a potentially significant impact. There are no mitigation measures that can fully mitigate this impact and, given the fact that once the land is converted, it will no longer be a viable migration corridor for any species. Implementation of the proposed project would have a ***significant and unavoidable*** impact relative to the loss of movement habitat through the Specific Plan Area, combined with the loss of upland habitat.

Impact 3.2-10: The proposed project has the potential to conflict with an adopted Habitat Conservation Plan or Natural Community Conservation Plan (Less than Significant)

The proposed project is not subject to a Habitat Conservation Plan or Natural Community Conservation Plan. Therefore, the proposed project would have a ***less than significant*** impact relative to this topic.

Impact 3.2-11: The proposed project has the potential to conflict with local policies or ordinances protecting biological resources (Less than Significant)

State law requires any decision by a city affecting land use and development to be consistent with its General Plan. This determination is ultimately made by the City Council. If an action, program or project is inconsistent with the General Plan, State law requires it be reconciled. This may involve modification to the action, program, or project, or amendment of the General Plan. Therefore, this impact discussion will evaluate the proposed projects' consistency with the Salinas General Plan as it related to biological resources. The evaluation will consider the proposed project's consistency with the adopted General Plan policies included within the Conservation/Open Space Element of

the Salinas General Plan. This impact discussion also includes an evaluation of the project's consistency with the City of Salinas Municipal Code.

City of Salinas General Plan: The following discussion analyzes the project's consistency with the relevant goal and policies of the City's General Plan.

Policy COS-1.6: Enforce national (NPDES) requirements and participate in regional efforts to protect and enhance water quality.

Impacts associated with hydrology and water quality are analyzed in Section 3.6, Hydrology and Water Quality, of this EIR. As noted in Impact 3.6-1, In accordance with the NPDES Stormwater Program, Mitigation Measure 3.6-1 ensures compliance with existing regulatory requirements to prepare a SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the RWQCB has deemed effective in controlling erosion, sedimentation, runoff during construction activities. Additionally, Mitigation Measure 3.6-2 requires the project applicant to submit detailed plans and calculations for water quality BMPs and water quality detention/retention basins design, consistent with the City's NPDES permit requirements. These are regulatory requirements that have been incorporated into the EIR as mitigation to ensure water quality is maintained. The proposed project is consistent with Policy COS-1.6.

Policy COS-5.1: Protect and enhance creek corridors, river corridors, the reclamation ditch, sloughs, wetlands, hillsides and other potentially significant biological resources for their value in providing visual amenity, flood protection, habitat for wildlife and recreational opportunities.

The Plan Area does not contain creek corridors, river corridors, reclamation ditches, sloughs, wetlands, or hillsides. There is an area located near the intersection of Natividad Road and Rogge Road that had a dry pond during previous surveys. The most recent surveys show that this dry pond is no longer present. Aerial photos show that the dry pond was converted back to agricultural use sometime around 2004 to 2005. This area has been farmed ever since.

The Plan Area contains an internal network of agricultural ditches along the margins of the farm fields. These areas were mostly void of vegetation during the field surveys of September 2015 and April 2016. Farmworkers indicated that the ditches are regularly maintained to control/collect irrigation runoff from the fields. These features are manmade and are fed only by local irrigation water during the irrigation season or rainfall during the winter/spring season.

The Plan Area contains a roadside ditch located along the east side of San Juan Grade Road. The ditch was also constructed to support agricultural operations, and drains agricultural runoff into the existing City storm water drainage system. The ditch is approximately six feet in width and three feet in depth. The ditch drains into a culvert in San Juan Grade Road and ultimately into the Santa Rita Creek. Santa Rita Creek flows west away from the city and enters the Reclamation Ditch east of SR 183 just over one-mile south of Castroville.

The Plan Area contains a roadside ditch located along the north side of East Boronda Road. The ditch was constructed to support agricultural operations, and drains agricultural runoff from most of the Specific Plan Area into the existing City storm water drainage system. The ditches range from five to nine feet in width from top of bank to top of bank, and range from 1.5 to three feet in depth. The total length of drainage ditch is approximately 6,618 feet. The City of Salinas and their consultants have had preliminary discussions with the USACE about this roadside ditch in coordination with the East Boronda Road Widening Project. Through that consultation, the USACE has indicated that they intend to exert their jurisdiction over the roadside ditch. This road widening project is being led by the City of Salinas, and it is anticipated that the City and their consultants will pursue a 404 permit through the Nationwide Permit process (i.e. NWP 14 for linear transportation projects). It is anticipated that the fill activities would be completed under the East Boronda Road widening project and that the hydrology would change from an open roadside ditch to and underground pipe. If the WASP project moved forward prior to the East Boronda road widening project, then a permit would be required prior to any fill activities in this roadside ditch. A mitigation measure has been incorporated into this project to ensure that no fill activities of any ditches occur within consultation and/or permitting from the USACE. Therefore, the proposed project is consistent with Policy COS-5.1.

Policy COS-5.2: Explore with Monterey County the potential for creation of a Gabilan Creek Regional Park extending along the creek from the urban edge to the headwaters in the Gabilan Mountains.

Gabilan Creek is located approximately 0.37 miles east of the western Plan Area boundary. The Gabilan Mountains are located further east of the Creek. Therefore, the proposed project is consistent with Policy COS-5.2.

Policy COS-7.2: Maximize the use of built and natural features to develop a citywide network of parks and open spaces with Carr Lake, Gabilan Creek and the Sherwood Park/Rodeo Grounds complex as essential elements of the open space network.

Carr Lake, Gabilan Creek and the Sherwood Park/Rodeo Grounds complex are not located on the Plan Area. However, proposed project includes ample park and open space uses such that all residents will be within an approximately five-minute walking time of a neighborhood or small park and ten minutes from the community park. The proposed project is consistent with Policy COS-7.2.

Policy COS-7.11: Develop and maintain an integrated system of open-space corridors and trails along utility easements, power-transmission-line rights-of-way, the reclamation ditch, stream banks, drainage-ways, slopes, and other natural features.

The proposed project includes development of an integrated system of open-space corridors and trails. The proposed project is consistent with Policy COS-7.11.

City of Salinas Municipal Code: Chapter 35, Trees and Shrubs, of the Salinas Municipal Code protects heritage and/or landmark trees through permit requirements. Section 35-9 outlines the

permit requirements for trimming, pruning, planting, removing, or otherwise interfering with any tree, shrub, or plant upon any street, parkway, or alley in the City. Section 35-18 prohibits the removal of heritage or landmark oak trees from City property except with the prior written approval by the Director.

There are few trees located in the Plan Area. All of the on-site trees are landscape trees located in the western portion of the Plan Area along San Juan Grade Road. A few scattered trees are located near the residence southeast of the San Juan Grade Road / Van Buren Avenue intersection, and a few are located further north at another private residence on San Juan Grade Road. The species of these trees are eucalyptus (*Eucalyptus* sp.) and other ornamental species types.

Any removal of these trees would be required to comply with the provisions of the Salinas Municipal Code, including Chapter 35. This is an existing standard and regulation that is enforced by the City of Salinas during the improvement/grading plan and/or building plan phase of a project.

Conclusion: The project proponent would be required to comply with the provisions of the City's General Plan and Municipal Code. As demonstrated above, the proposed project is generally consistent with the above relevant open space and conservation policies of the General Plan, as well as the City's Municipal Code. Overall, the proposed project would have a ***less than significant*** impact relative to this topic.

Impact 3.2-12: Cumulative loss of biological resources including habitats and special status species (Cumulatively Considerable and Significant and Unavoidable)

Under cumulative conditions, buildout of the Salinas General Plan, including the recently approved Salinas EDE, will result in cumulative impacts to biological resources through new and existing development. The General Plan includes policies that are designed to minimize impacts to the extent feasible.

There are various biological resources, including habitat, that occurs throughout the region. The Plan Area is intensively cultivated and provides little to no habitat for most special status species. Nevertheless, there remains a potential that special status species could occupy the Plan Area from time to time. Mitigation measures incorporated into the WASP project are intended to avoid, minimize, and compensate for direct and indirect effects to biological resources, including special status species and their habitats.

The WASP project will eliminate the onsite irrigation ditches, which provide some, but relatively little habitat quality. The WASP project is anticipated to eliminate the roadside ditches located along East Boronda Road and San Juan Grade Road. These ditches also provide some, but relatively little habitat quality. Mitigation measures incorporated into the WASP project are intended to ensure that any fill activities are authorized by the appropriate regulatory agencies prior to disturbance. The permit process ensures that minimization and compensation is incorporated into the activity.

The WASP project will change the habitat type from an open agricultural field to an urban developed area. Urban development will provide habitat for a variety of species; however, it will be lower quality habitat then the current agricultural land. While the City has evaluated urban development in the Plan Area extensively through the General Plan and FGA process, and subsequently determined that urban development in this location is appropriate, the physical change is not reversible and there are no mitigation measures that can fully mitigate this impact. implementation of the WASP would have a ***cumulatively considerable contribution*** and ***significant and unavoidable*** impact to biological resources.

Legend

- BAY AREA/DELTA
- CENTRAL COAST
- COLORADO DESERT
- KLAMATH/NORTH COAST
- MODOC
- MOJAVE
- SACRAMENTO VALLEY
- SAN JOAQUIN VALLEY
- SIERRA
- SOUTH COAST

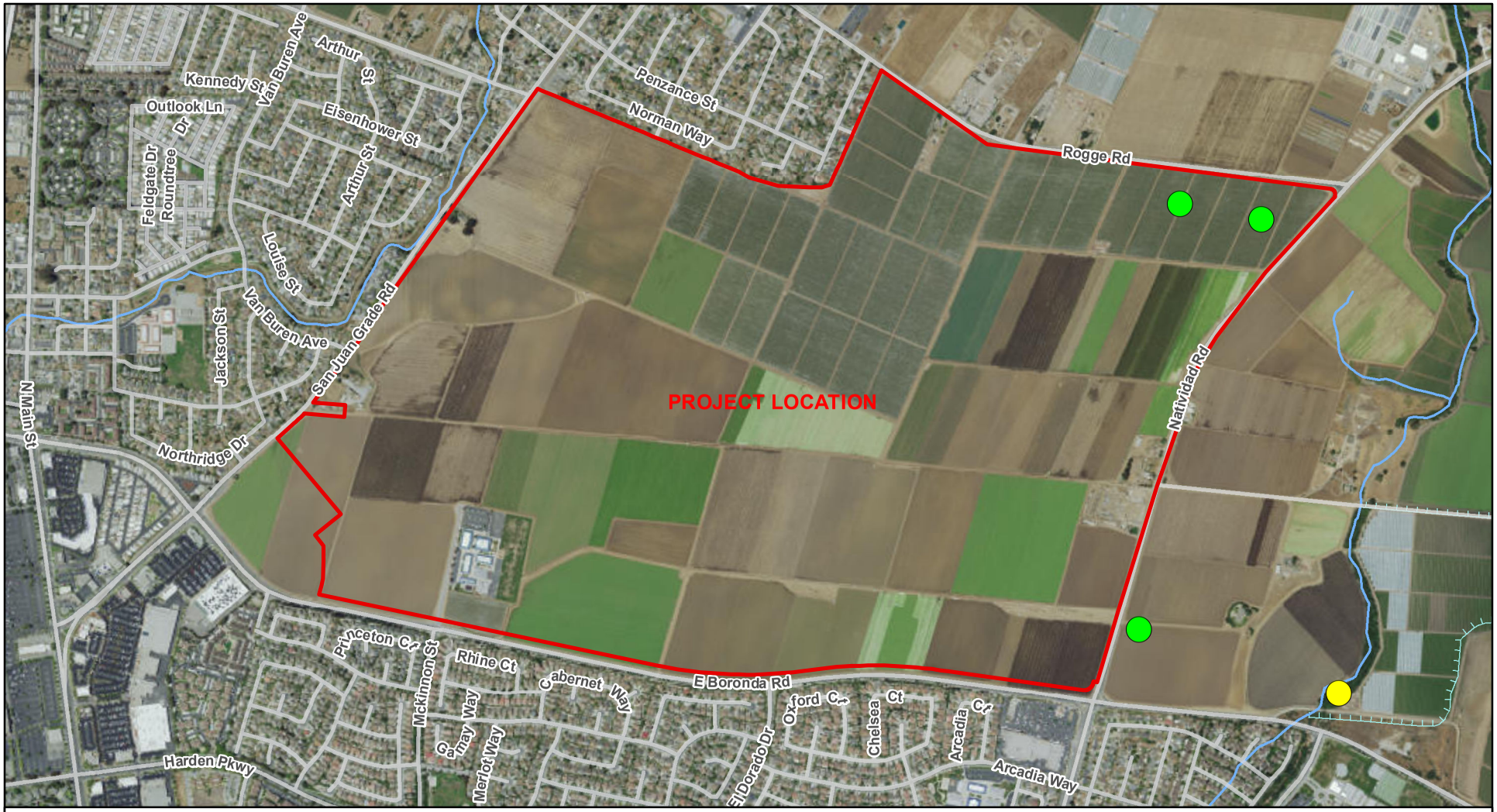
Sources: Inter-agency Natural Areas Coordinating Committtee (INACC), 2004; California Spatial Information Library. Map date: April 25. 2016.

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.2-1: Bioregions Map

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.



Legend

- California horned lark, males/pairs
- Yellow warbler, singing males

N

0 600 1,200

Feet

1:16,000

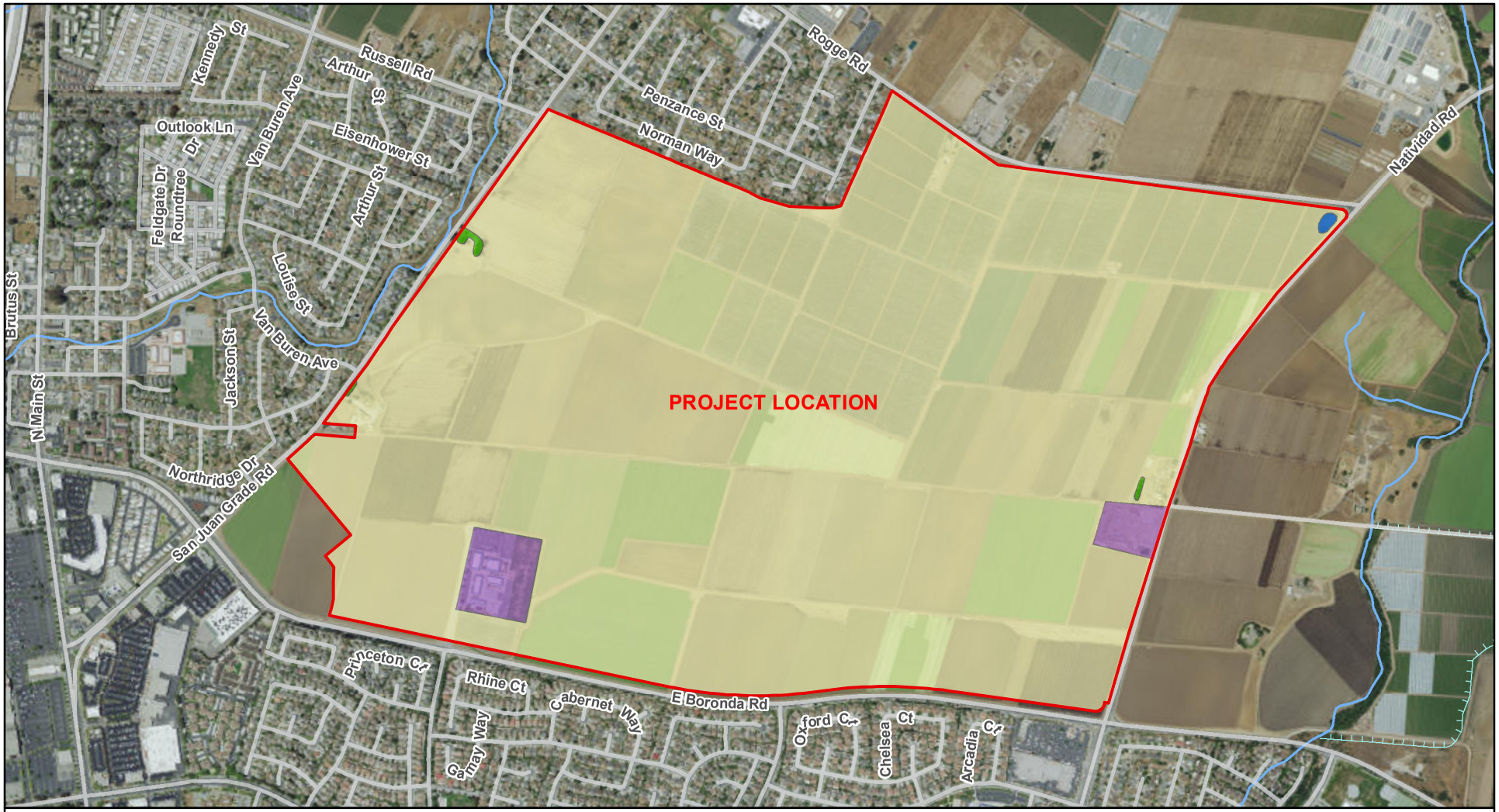
CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.2-2. Wildlife Observations

Sources: Biotic Resources Group; Monterey County GIS; USGS National Hydrography Database; ArcGIS Online Aerial Imagery Service. Map date: April 25, 2016. Revised November 21, 2016.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.



Legend

- Agricultural Fields
- Developed Area
- Landscape Trees (eucalyptus and other)
- Pond (dry)

N

0 600 1,200

Feet

1:16,000

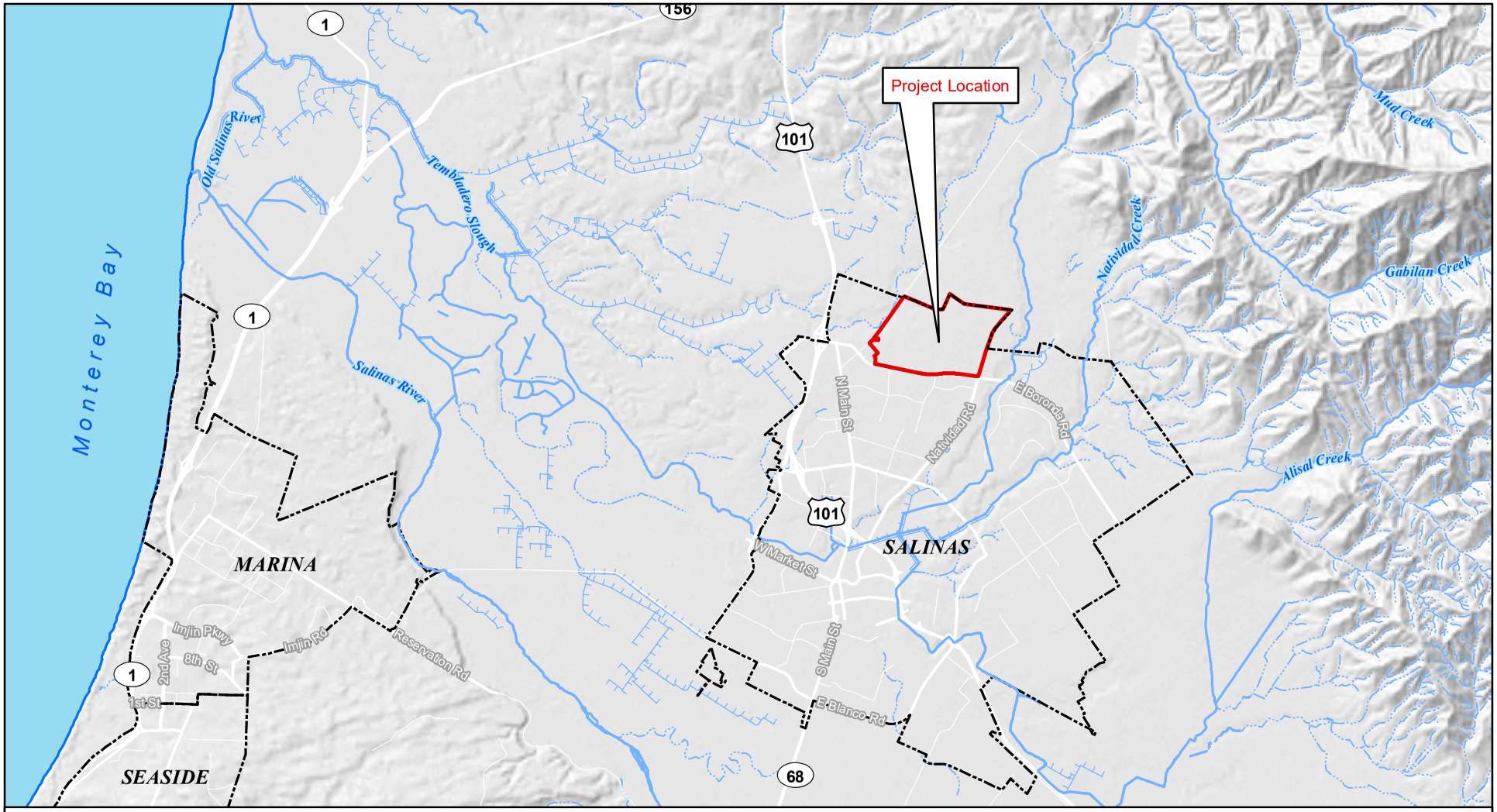
CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.2-3. Existing Plant Communities

Sources: Biotic Resources Group; Monterey County GIS; USGS National Hydrography Database; ArcGIS Online Aerial Imagery Service. Map date: April 25, 2016. Revised November 21, 2016.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.



USGS Stream Type

- Perennial Stream
- Intermittent Stream
- Canal or Ditch
- Coastline

N

0 0.5 1

Miles

1:120,000

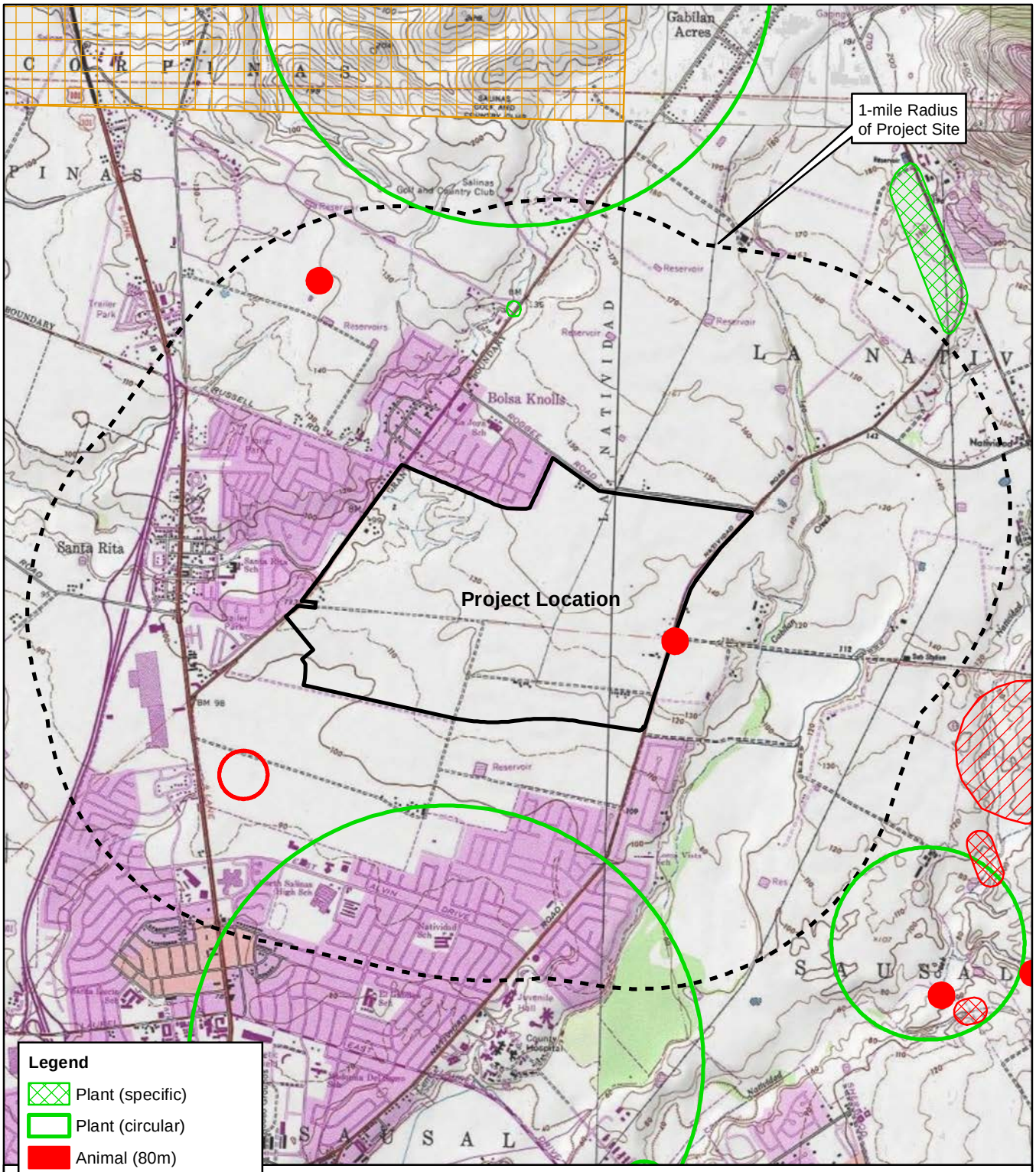
CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.2-4. Hydrology Map

Sources: USGS National Hydrography Dataset; Monterey County GIS. Map date: April 26, 2016. Revised November 21, 2016.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.



CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.2-6. California Natural Diversity Database

1-mile Radius Search

N

0 1,000 2,000

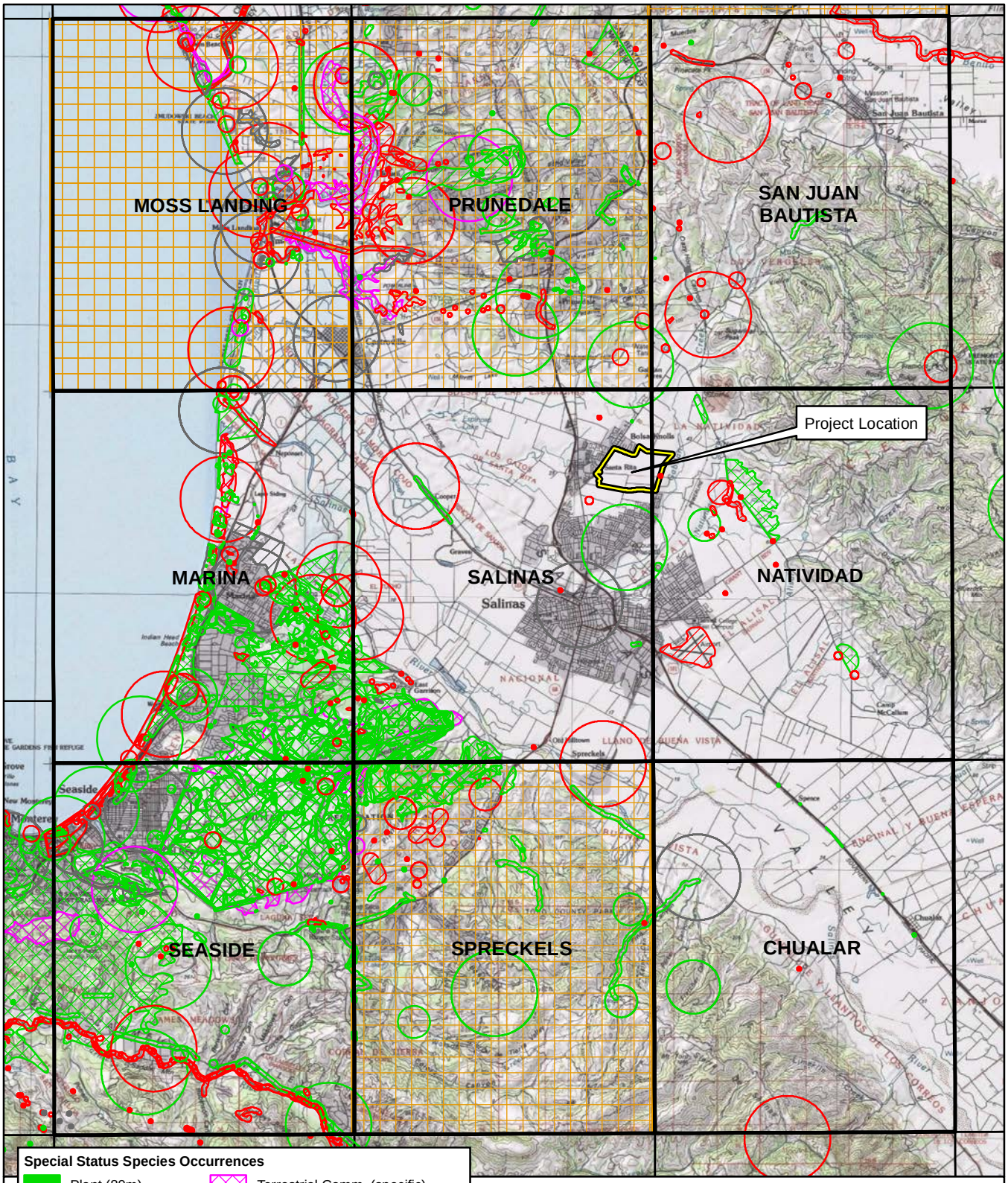
Feet

1:36,000

CNDDB version 10/01/2017. Please Note: the occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not been surveyed and/or mapped. Lack of information in the CNDDB about a species or an area can never be used as proof that no special status species occur in an area. Basemap: ArcGIS Online Topographic Map Service. Map date: October 29, 2017.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.



CITY OF SALINAS WEST AREA SPECIFIC PLAN

Figure 3.2-6: California Natural Diversity Database

9-Quad Search

CNDDB version 07/01/2017. Please Note: the occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not been surveyed and/or mapped. Lack of information in the CNDDB about a species or an area can never be used as proof that no special status species occur in an area. Basemap: ArcGIS Online Topographic Map Service. Map date: July 10, 2017.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.

This section provides a background discussion of the prehistoric period background, ethnographic background, and historic period background, known cultural resources in the region, the regulatory setting, impact analysis, and mitigation measures. Information in this section is derived primarily from the *Cultural Resource Assessment of the Proposed Project*, Peak and Associates, March 2016. This report is attached as Appendix D. Two comments were received during the public review period for the NOP related to cultural resources (identified below). Comment letters are included in Appendix A.

- The Native American Heritage Commission responded with a letter dated August 12, 2015.
- The Ohlone/Costanoan-Esselen Nation (OCEN) responded with a letter dated January 11, 2016. The OCEN requested to be included in ongoing project consultation. The letter did not identify any cultural resources in the Specific Plan Area.

KEY TERMS

Cultural and Historic Resources are defined as buildings, sites, structures, or objects that may have historical, architectural, archaeological, cultural, or scientific importance. Preservation of the city's cultural heritage should be considered when planning for the future.

Archaeology. The study of historic or prehistoric peoples and their cultures by analysis of their artifacts and monuments.

Complex. A patterned grouping of similar artifact assemblages from two or more sites, presumed to represent an archaeological culture.

Ethnography. The study of contemporary human cultures.

Midden. A deposit marking a former habitation site and containing such materials as discarded artifacts, bone and shell fragments, food refuse, charcoal, ash, rock, human remains, structural remnants, and other cultural leavings.

Paleontology. The science of the forms of life existing in former geologic periods, as represented by their fossils.

3.3.1 ENVIRONMENTAL SETTING

PREHISTORY

Humans are believed to have resided in northern Monterey County for the past 13,000 years. Archeologists who have studied these past cultures have uncovered evidence of widespread activities that allowed them to divide these previous 13,000 years into periods or phases based on the kinds of subsistence behaviors practiced.

Six periods have been identified with locally defined phases and regional cultures added to the mix. The six periods are (from Jones and Klar 2007):

- Paleo-Indian Period, pre 8000 B.C
- Millingstone (or Early Archaic) Period, 8000 – 3500 B.C.

- Early Period, 3500 – 600 B.C.
- Middle Period, 600 B.C. – A.D. 1000
- Middle/Late Transition Period, A.D. 1000 – A.D. 1250
- Late Period, A.D. 1250 – A.D. 1769

Paleo-Indian Period (13,000 – 8000 B.C.)
Little is known about the earliest inhabitants in the area except for a few isolated artifacts that include a fluted spear point. Archeologists have yet to uncover a habitation site from this period that would allow for a greater understanding of how these people lived apart from hunting big game.

Millingstone (or Early Archaic) Period (8000 – 3500 B.C)
Over 40 archeological sites have been discovered with evidence from the people of this time period. Coastal resources were the focus of the early peoples, but the collection and processing of seeds was paramount during this period with a secondary reliance on hunting. Millingstones and handstones, also known by their Spanish name metates and manos are common tools for these early inhabitants while the side-notched spear points and other stone tools created for hunting purposes are less numerous.

Early Period (3500 – 600 B.C.)
This period witnessed a shift from the reliance of coastal resources and seeds to an increased focus on hunting. Deposits from this period are full of various kinds of spear points indicating wild game was now a preference for the dinner menu. The switch from millingstones and a seed based diet to one with meat was widespread throughout the Central Coast.

Middle Period (600 B.C. – A.D. 1000)
Diversification is the key to understanding this period as the early inhabitants began to utilize the resource base in more varied ways. Spear points are still very common but new tools such as the portable mortar and pestle and circular shell fishhooks become widespread. The Middle Period also witnesses the first use of a revolutionary technological development, the bow and arrow.

Middle/Late Transition Period (A.D. 1000 – 1250)
Perhaps it was the bow and arrow to blame, but significant changes took place in a relatively short period of time. Coastal resources were still favored, but a new push toward inland areas occurred and deer looks to have been the animal of choice hunting-wise.

Late Period (A.D. 1250 – 1769)
This period saw a new food discovered, literally growing right over their heads. Acorns became king and suddenly the vast interior valleys, full of oak trees, looked a lot more attractive. Hunting and acorn collection were often practiced simultaneously at special use camps scattered throughout the interior areas. Where bedrock was suitable, mortar holes used to process acorns proliferate.

ETHNOLOGY

Mutsun ancestors of the Ohlone people moved into the San Francisco and Monterey Bay areas from the Delta of the San Joaquin and Sacramento rivers about A.D. 500. The designation

"Costanoan," which was originally applied to this group by anthropologists and others, derives from the Spanish term for coastal people, and was not used by the Indian people. Ohlone territory extended from the Carquinez Strait in the northeast to just south of Chalome Creek in the southeast and from San Francisco to the Sur River along the Coast. This vast territory was broken into eight different language based zones. These eight branches of the Costanoan linguistic family were separate languages, not dialects.

The project location lies in the southern portion of the territory of the Mutsun. The Mutsun Costanoan occupied the land along the Pajaro River drainage. It is estimated that their population was approximately 2,700 in 1770. They situated their permanent villages on high ground above seasonal marshes that were inundated by highwater for a few months of the year. Access to fresh drinking water was a criterion for selecting a village location.

The basic political unit of the Ohlone, like many Californian Native Americans, was the tribelet, a group of people who spoke a common language and lived in a contiguous area centered on a main village. Territorial boundaries of tribelets were defined by physiographic features. Tribelet chiefs might be either men or women. The office was inherited patrilineally, usually passing from father to son. When there were no male heirs the position went to the man's sister or daughter. Accession to the office of chief required approval of the community. The chief was responsible for feeding visitors, providing for the impoverished, directing ceremonial activities, caring for captive grizzly bears and coyote, and directing hunting, fishing, gathering, and warfare expeditions. In all these matters the chief acted as the leader of a council of elders. The chief and council served mainly as advisors to the community (Levy 1978:487).

The Ohlone had mixed relations with various peoples. Wars were waged both among the various Costanoan tribelets and with Esselen, Salinan, and Northern Valley Yokuts. At the same time, however, they augmented the wealth of locally-available resources by trading with the Plains Miwok, Sierra Miwok, and Yokuts. The Ohlone supplied mussels, abalone shells, salt, and dried abalone to the Yokuts, bows to the Plains Miwok, and Olivella shells to the Sierra Miwok. In return, they received piñon nuts from the Yokuts and probably clam shell disk beads from the Miwok (Levy 1978:488-489, 493).

The Ohlone followed a seasonal round of subsistence activities, gathering plant and animal foods and materials for baskets and other manufactures. They insured a sustained yield of plant and animal foods by careful management of the land. Large mammals consumed by the Ohlone included black-tailed deer, Roosevelt elk, antelope, grizzly bear, mountain lion, sea lion, and whale. The most effective method of hunting deer was stalking by individual hunters. Other mammals eaten included dog, wildcat, skunk, raccoon, brush rabbit, cottontail, jackrabbit, tree squirrel, ground squirrel, woodrat, mouse, and mole. Some of the types of fowl they ate include the Canadian goose, snow goose, pintail mallard, and the mourning dove. In addition to animals, the Ohlone also ate seeds including acorns and buckeye and berries including blackberries, strawberries, and wild grapes among others (Levy 1978:491).

Religion and ceremony played important roles in life and death. The Ohlone observed rituals at important life events such as birth, puberty, and death. Treatment of the dead varied, with

northern groups reportedly cremating their dead except when there were no kinsman to gather wood for a funeral pyre, in which case the corpse was buried (Kroeber 1925:469; Levy 1978:490). The southern groups, Rumsen and Chalon, buried their dead.

Shamans controlled the weather and could cause rain to start or stop. They cured disease by cutting the skin of the patient, sucking out the disease objects and exhibiting them to onlookers. Shamans also used herbs in curing disease and conducted performances to insure good crops of acorns, an abundance of fish, or the stranding of whales (Levy 1978:490).

Spanish explorers of coastal California between 1767 and 1776 described the Costanoans living a traditional existence. Between 1770 and 1797, the Franciscans established seven missions in Ohlone territory and effectively changed the Indian way of life. Unwilling recruits to the missions resisted control by Franciscans. In 1793, a runaway neophyte named Charquin began a three-year struggle during which tribes in the northeast Bay Area engaged in sporadic warfare with the Spanish. The Ohlone also mounted resistance against Mission San Jose in 1800 (Castillo 1978:103). Levy (1978:486) reports that "mission baptismal records demonstrate that the last Costanoan tribelets living an aboriginal existence had disappeared by 1810," and that by 1832 the Costanoan population had decreased to one-fifth or less than its pre-contact size. After the Mexican government secularized the missions (between 1834 and 1836), some Ohlone returned to traditional religious and subsistence practices while others worked on Mexican ranchos. Former mission residents formed multi-tribal Indian communities in Pleasanton and other locations within their traditional territory. Although the Ohlone languages were probably extinct by 1935, it has been estimated that more than 200 persons of Ohlone descent were living in 1973 (Levy 1978:487).

HISTORIC PERIOD BACKGROUND

The general history of the exploration and settlement of Monterey County has been documented in a number of sources. This background section focuses on the specific history of Salinas and the WASP area.

The lands of WASP were first claimed by non-Native peoples through land grants from the Mexican government. The northern portion of the WASP lies on lands of the La Natividad land grant, and the southern portion is the Sausal land grant.

The La Natividad land grant consisted of two square leagues of land (15,256 acres) south of Gabilan Creek. The land was granted to Manuel Butron and Nicolás Alviso by Governor Alvarado in November 1837. The land grant of 8,631 acres was confirmed to the children of Butron and Alviso by the United States in 1853.

The Sausal grant was made to José Tiburcio Castro in 1834. Castro had built an adobe on the land in 1823. Jacob P. Leese, who owned tracts of land in many parts of the state, acquired the property. He first filed claims for the grant in 1853. He ultimately received a patent for a tract of 10,241 acres from the United States in 1859.

Eugene Sherwood purchased the lands of the Sausal land grant. Sherwood, born in London, had come to San Francisco in 1856 as the American representative and manager of a company formed with the intention of raising sheep on a chain of ranches extending from southern Monterey County to San Francisco. The sheep would be sheared at the outskirts of San Francisco, with the product shipped from that point.

Sherwood had also purchased the lands of the 24,000 acre San Lorenzo land grant in 1859 for his sheep raising enterprise. Sherwood suffered a string of losses in the mid to late 1860s due to drought and flood, and sold off his sheep herd and the San Lorenzo ranch. He then moved to Sausal, growing grain on a portion of the land. He rented out the remainder of the land for cash or on shares, with hundreds of acres put into production for wheat (Guinn 1910).

Sherwood was one of the early promoters of Salinas, reportedly offering free land to the Southern Pacific Railroad for its right of way and a depot to lure the railroad through this region from San Jose, instead of the rumored route through the San Joaquin Valley. As a result, there was a building boom in Salinas, with 50 residences built in four months in 1868 (Fink1978:141).

By 1881, Salinas had grown to about 4,000 residents with hotels, paved streets, stores and many residences, in part due to its location on the railroad line (Elliott & Moore 1881).

Portions of the ranch were sold off, but Sherwood reportedly retained some of the land as late as 1910. In 1883, he retired from active management of his lands, and moved to San Francisco, and later to Alameda (Guinn 1910).

The southern portion of the property in the Sausal land grant had been acquired by Duncan McKinnon by 1877. McKinnon owned this property as a portion of an 1,104-acre tract. His ranch headquarters were to the south of the WASP (Cox 1877).

Duncan McKinnon had an early life of adventure, including working in the Frazer River area in British Columbia during the gold rush years in the 1860s, returning to Santa Clara in 1866 and renting a farm. He went home to Canada, then sold the family home and returned to Santa Clara in 1867. After the harvest of his lands in that year, he went in search of land for farming purposes in Monterey County. He rented part of the Santa Rita lands, and part of the Sausal rancho lands (Elliott & Moore 1881).

In 1874, McKinnon and his brother purchased the 1,100-acre tract of the Sausal land grant that includes the southern portion of the WASP. Duncan McKinnon bought out his brother's interest in the property in 1881 (Elliott & Moore 1881).

Just west of the WASP in the community of Santa Rita, first platted in 1867 as a town by J.M. Soto, the owner of the Ranch Santa Rita. Originally, it was meant to be the main town in the region. In 1869, Dr. S.M. Archer started a hospital on lots in the center of town adjacent to his residence (Elliott & Moore 1881).

In 1903, Duncan McKinnon's son had taken over management of the Santa Rita ranch of 365 acres, with younger son, Elmer, managing the home ranch of 1,100 acres (Guinn 1903).

The lands of the WASP have been held as open agricultural lands for many years, with some development occurring along the west and east sides before 1947 (Salinas and Natividad USGS topographic quadrangles).

PALEONTOLOGICAL RESOURCES

The often unseen records of past life buried in the sediments and rocks below the ground surface are among natural resources deserving conservation and preservation. These records are often under the pavement, buildings, soils, and vegetation that are covered by developed areas, but are also found in undeveloped areas that are either in its natural condition or under agricultural use. These records – fossils and their geologic context – can exist in large quantities below the surface in many areas in Monterey County, and span millions of years in age of origin. Fossils constitute a non-renewable resource, meaning once they are lost or destroyed, the exact information they contained can never be reproduced.

Paleontology is the science that attempts to unravel the meaning of these fossils in terms of the organisms they represent, the ages and geographic distribution of those organisms, how they interacted in ancient ecosystems and responded to past climatic changes, and the changes through time of all of these aspects.

The sensitivity of a given area or body of sediment with respect to paleontological resources is a function of both the potential for the existence of fossils and the predicted significance of any fossils which may be found there. The primary consideration in the determination of paleontological sensitivity of a given area, body of sediment, or rock formation is its potential to include fossils. Information that can contribute to assessment of this potential includes: 1) direct observation of fossils within the project area; 2) the existence of known fossil localities or documented absence of fossils in the same geologic unit (e.g., “Formation” or one of its subunits); 3) descriptive nature of sedimentary deposits (such as size of included particles or clasts, color, and bedding type) in the area of interest compared with those of similar deposits known elsewhere to favor or disfavor inclusion of fossils; and 4) interpretation of sediment details and known geologic history of the sedimentary body of interest in terms of the ancient environments in which they were deposited, followed by assessment of the favorability of those environments for the preservation of fossils.

The most general paleontological information can be obtained from geologic maps, but geologic cross sections (slices of geologic layers to view the third dimension) must be reviewed for an area in question (i.e. if such resources are discovered). These usually accompany geologic maps or technical reports. Once it can be determined which formations may be present in the subsurface, the question of paleontological resources must be addressed. Even though a formation is known to contain fossils, they are not usually distributed uniformly throughout the many square miles the formation may cover. If the fossils were part of a marine environment when they died, perhaps a scattered layer of shells will be preserved over large areas. If on the other hand, a whale died in this bay, you might expect to find fossil whalebone only in one small area of less than a few hundred square feet. Other resources to be considered in the determination of paleontological

potential are regional geologic reports, site records on file with paleontological repositories and site-specific field surveys.

Paleontologists consider all vertebrate fossils to be of significance. Fossils of other types are considered significant if they represent a new record, new species, an oldest occurring species, the most complete specimen of its kind, a rare species worldwide, or a species helpful in the dating of formations. However, even a previously designated low potential site may yield significant fossils.

CULTURAL RESOURCES IN THE WEST AREA SPECIFIC PLAN AREA

There are no cultural resources that were found during field surveys for the proposed project. Additionally, there are no cultural resources that have been identified in the Specific Plan Area on maps and files maintained by the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS). There have been three previous cultural resource studies that examined approximately three-quarters of the Specific Plan Area and no cultural resources were documented. The Monterey County Historic Property Data File Directory and National Register of Historic Resources do not list any cultural resources in the Specific Plan Area.

Most fossils within Monterey County consist of micro-organisms such as foraminifera or diatoms, or assemblages of mollusks and barnacles most commonly found in sedimentary rocks ranging from Cretaceous age (138 to 96 million years old) to Pleistocene age (1.6 million to 11 thousand years old). Fossils are found throughout the county because of the widespread distribution of marine deposits. No significant fossil records have been discovered within the Specific Plan Area. However, the City of Salinas General Plan EIR (2002) identifies that important paleontological resources have the potential to occur within the planning area, including in the undeveloped future growth areas which include the Specific Plan Area.

3.3.2 REGULATORY SETTING

FEDERAL

National Historic Preservation Act

Most regulations at the Federal level stem from the National Environmental Policy Act (NEPA) and historic preservation legislation such as the National Historic Preservation Act (NHPA) of 1966, as amended. NHPA established guidelines to "preserve important historic, cultural, and natural aspects of our national heritage, and to maintain, wherever possible, an environment that supports diversity and a variety of individual choice." The NHPA includes regulations specifically for Federal land-holding agencies, but also includes regulations (Section 106) which pertain to all projects that are funded, permitted, or approved by any Federal agency and which have the potential to affect cultural resources. All projects that are subject to NEPA are also subject to compliance with Section 106 of the NHPA and NEPA requirements concerning cultural resources. Provisions of NHPA establish a National Register of Historic Places (The National Register) maintained by the National Park Service, the Advisory Councils on Historic Preservation, State Historic Preservation Offices, and grants-in-aid programs.

American Indian Religious Freedom Act and Native American Graves and Repatriation Act

The American Indian Religious Freedom Act recognizes that Native American religious practices, sacred sites, and sacred objects have not been properly protected under other statutes. It establishes as national policy that traditional practices and beliefs, sites (including right of access), and the use of sacred objects shall be protected and preserved. Additionally, Native American remains are protected by the Native American Graves and Repatriation Act of 1990.

Other Federal Legislation

Historic preservation legislation was initiated by the Antiquities Act of 1966, which aimed to protect important historic and archaeological sites. It established a system of permits for conducting archaeological studies on Federal land, as well as setting penalties for noncompliance. This permit process controls the disturbance of archaeological sites on Federal land. New permits are currently issued under the Archeological Resources Protection Act (ARPA) of 1979. The purpose of ARPA is to enhance preservation and protection of archaeological resources on public and Native American lands. The Historic Sites Act of 1935 declared that it is national policy to "Preserve for public use historic sites, buildings, and objects of national significance."

STATE

California Register of Historic Resources (CRHR)

California State law also provides for the protection of cultural resources by requiring evaluations of the significance of prehistoric and historic resources identified in documents prepared pursuant to the California Environmental Quality Act (CEQA). Under CEQA, a cultural resource is considered an important historical resource if it meets any of the criteria found in Section 15064.5(a) of the CEQA Guidelines. Criteria identified in the CEQA Guidelines are similar to those described under the NHPA. The State Historic Preservation Office (SHPO) maintains the CRHR. Historic properties listed, or formally designated for eligibility to be listed, on The National Register are automatically listed on the CRHR. State Landmarks and Points of Interest are also automatically listed. The CRHR can also include properties designated under local preservation ordinances or identified through local historical resource surveys.

California Environmental Quality Act (CEQA)

CEQA requires that lead agencies determine whether projects may have a significant effect on archaeological and historical resources. This determination applies to those resources which meet significance criteria qualifying them as "unique," "important," listed on the California Register of Historic Resources (CRHR), or eligible for listing on the CRHR. If the agency determines that a project may have a significant effect on a significant resource, the project is determined to have a significant effect on the environment, and these effects must be addressed. If a cultural resource is found not to be significant under the qualifying criteria, it need not be considered further in the planning process.

CEQA emphasizes avoidance of archaeological and historical resources as the preferred means of reducing potential significant environmental effects resulting from projects. If avoidance is not feasible, an excavation program or some other form of mitigation must be developed to mitigate the impacts. In order to adequately address the level of potential impacts, and thereby design appropriate mitigation measures, the significance and nature of the cultural resources must be determined. The following are steps typically taken to assess and mitigate potential impacts to cultural resources for the purposes of CEQA:

- Identify cultural resources,
- evaluate the significance of the cultural resources found,
- evaluate the effects of the project on cultural resources, and
- develop and implement measures to mitigate the effects of the project on cultural resources that would be significantly affected.

Treatment of paleontological resources under CEQA is generally similar to treatment of cultural resources, requiring evaluation of resources in a project's area of potential affect, assessment of potential impacts on significant or unique resources, and development of mitigation measures for potentially significant impacts, which may include monitoring combined with data recovery and/or avoidance.

State Laws Pertaining to Human Remains

Section 7050.5 of the California Health and Safety Code requires that construction or excavation be stopped in the vicinity of discovered human remains until the county coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the California Native American Heritage Commission. CEQA Guidelines (Section 15064.5) specify the procedures to be followed in case of the discovery of human remains on non-Federal land. The disposition of Native American burials falls within the jurisdiction of the Native American Heritage Commission.

State Laws Pertaining to Paleontological Resources

Section 5097.5 of the California Public Resources Code prohibits "knowing and willful" excavation, removal, destruction, injury, and defacement of any "vertebrate paleontological site, including fossilized footprints," on public lands, except where the agency with jurisdiction has granted express permission. "As used in this section, 'public lands' means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof."

Section 30244 of the California Public Resources Code requires reasonable mitigation for impacts on paleontological resources that occur as a result of development on public lands.

The California Administrative Code relating to the State Division of Beaches and Parks affords protection to geologic features and "paleontological materials" but grant the director of the State park system authority to issue permits for specific activities that may result in damage to such

resources, if the activities are in the interest of the State park system and for State park purposes (California Administrative Code, Title 14, Section 4307–4309).

Senate Bill 18 (Burton, Chapter 905, Statutes 2004)

SB 18, authored by Senator John Burton and signed into law by Governor Arnold Schwarzenegger in September 2004, requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places ("cultural places") through local land use planning. This legislation, which amended §65040.2, §65092, §65351, §65352, and §65560, and added §65352.3, §653524, and §65562.5 to the Government Code; also requires the Governor's Office of Planning and Research (OPR) to include in the General Plan Guidelines advice to local governments on how to conduct these consultations. The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code §65300 et seq.) and specific plans (defined in Government Code §65450 et seq.).

Assembly Bill 52 (Chapter 532, Statutes of 2014)

Assembly Bill ("AB") 52 establishes a formal consultation process for California tribes as part of CEQA and equates significant impacts on "tribal cultural resources" with significant environmental impacts (PRC Section 21084.2). AB 52 defines a "California Native American Tribe" as a Native American tribe located in California, and included on the contact list maintained by the Native American Heritage Commission. AB 52 requires formal consultation with California Native American Tribes prior to determining the level of environmental document if a tribe has requested to be informed by the lead agency of proposed projects. AB 52 also requires that the consultation address project alternatives and mitigation measures, for significant effects, if requested by the California Native American Tribe, and that consultation be considered concluded when either the parties agree to measures to mitigate or avoid a significant effect, or the agency concludes that mutual agreement cannot be reached.

NATIVE AMERICAN CONSULTATION

Letters were sent to: the Native American Heritage Commission; Ms. Jakki Kehl; Tony Cerda, Chairperson, Coastanoan Rumsen Carmel Tribe; Ms. Louise Miranda-Ramirez, Chairperson, Ohlone Coastanoan-Esselen Nation; Ms. Ramona Garibay, Representative, Trina Marine Ruano Family; Mr. Valentine Lopez, Amah Mutsun Tribal Band; Ms. Irene Zwierlein, Chairperson, Amah Mutsun Tribal Band of Mission San Juan Bautista; Ms. Christianne Arias, Vice Chairperson Ohlone/Coastanoan-Esselen Nation; Mr. Edward Ketchum, Amah Mutsun Tribal Band; Ms. Pauline Martinez-Arias, Tribal Council Women, Ohlone/Coastanoan-Esselen Nation; Ms. Ann Marie Sayers, Chairperson, Indian Canyon Mutsun Band of Coastanoan; Ms. Linda G. Yamane; and, Ms. Michelle Zimmer, Amah Mutsun Tribal Band of Mission San Juan Bautista regarding the West Area Specific Plan Area. The Native American Heritage Commission responded with a letter dated August 12, 2015. The Ohlone/Costanoan-Esselen Nation (OCEN) responded with a letter dated January 11, 2016. Comment letters are included in Appendix A.

LOCAL

City of Salinas General Plan

The existing City of Salinas General Plan identifies the following policies related to cultural resources:

Conservation/Open Space Element

Policy COS-4.1: When historic buildings are renovated to extend their useful lives, the historic architecture should be maintained when possible.

Policy COS-4.2: Support private efforts to reinvest in and restore historically and architecturally significant structures and to continue their use as an integral part of the community.

Policy COS-4.3: Identify historic sites through historic landmark plaques and the Historic House Tour Guide.

Policy COS-4.4: Protect significant archaeological resources in accordance with the California Environmental Quality Act (CEQA).

City of Salinas Municipal Code

The City of Salinas Municipal Code Zoning Code section 37.50.180 (i) outlines cultural resources performance standards that are applicable in all use classifications in all zoning districts. For historic resources, a study shall be conducted for structures that potentially have historic significance to determine whether the structure is a historical resource. For archaeological resources, a study is only required if the development is located within the Carr Lake/Natividad Creek Corridor. The Zoning Code also states that all development proposals shall be assessed by the City planner for potential impacts to paleontological resources and a study may be required if the project involves earthwork.

3.3.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project is considered to have a significant impact on cultural resources if it will:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5;
- Cause a substantial adverse change in the significance of archaeological resource pursuant to CEQA Guidelines §15064.5;
- Directly or indirectly destroy a unique paleontological resource;
- Disturb any human remains, including those interred outside of formal cemeteries.

IMPACTS AND MITIGATION MEASURES

Impact 3.3-1: Project implementation may cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5 (Less than Significant with Mitigation)

There are no historical resources that were found during field surveys for the proposed project. Additionally, there are no historical resources that have been identified in the Specific Plan Area on maps and files maintained by the Northwest Information Center (NWIC). There have been three previous cultural resource studies that examined approximately three-quarters of the Specific Plan Area and no historical resources were documented. The Monterey County Historic Property Data File Directory and National Register of Historic Resources do not list any historical resources in the Specific Plan Area.

It is not anticipated that ground disturbing activities would result in impacts to historical resources given that none are believed to be present. However, as with most projects in California that involve ground disturbing activities, there is the potential for discovery of a previously unknown historical resource. The implementation of the following mitigation measure would ensure that this potential impact is reduced to a ***less than significant*** level.

MITIGATION MEASURES

Mitigation Measure 3.3-1: *If cultural resources (i.e., prehistoric sites, historic sites, and isolated artifacts and features) are discovered during the course of construction within the Specific Plan Area or at off-site infrastructure improvement locations, work shall be halted immediately within 50 meters (165 feet) of the discovery, the City of Salinas shall be notified, and a qualified archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology shall be retained to determine the significance of the discovery.*

The City of Salinas shall consider mitigation recommendations presented by the qualified archaeologist for any unanticipated discoveries and shall carry out the measures deemed feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The project proponent shall be required to implement any mitigation necessary for the protection of cultural resources.

Impact 3.3-2: Project implementation may cause a substantial adverse change in the significance of archaeological resource pursuant to CEQA Guidelines §15064.5 (Less than Significant with Mitigation)

There are no archaeological resources that were found during field surveys for the proposed project. Additionally, there are no archaeological resources that have been identified in the Specific Plan Area on maps and files maintained by the Northwest Information Center (NWIC). There have been three previous cultural resource studies that examined approximately three-quarters of the Specific Plan Area and no archaeological resources were documented. The

Monterey County Historic Property Data File Directory and National Register of Historic Resources do not list any archaeological resources in the Specific Plan Area.

It is not anticipated that ground disturbing activities would result in impacts to archaeological resources given that none are believed to be present. However, as with most projects in California that involve ground disturbing activities, there is the potential for discovery of a previously unknown archaeological resource. The implementation of Mitigation Measures 3.3-1 above would ensure that this potential impact is reduced to a ***less than significant*** level.

Impact 3.3-3: Project implementation may directly or indirectly destroy a unique paleontological resource (Less than Significant with Mitigation)

A search of the University of California, Berkeley Museum of Paleontology collections database of Paleontology Localities did not identify any paleontological resources (fossils or fossil formations) within the Specific Plan Area. However, no formal paleontological investigations have been identified for the area.

A search of the University of California Museum of Paleontology (UCMP) collections database identified many previously recorded paleontological resources in Monterey County. These resources primarily consist of microfossils and invertebrates, but also include a small number of vertebrates and plants.

The Monterey County General Plan Draft EIR (2007) included a review of known fossil localities conducted by paleontologists in 2001. Twelve fossil sites were identified as having outstanding scientific value. For the most part, the fossils at these 12 sites reflect the type of assemblages found throughout the county (microorganisms or invertebrates); however, each has special characteristics that make it unique or rare, or in some way provide important stratigraphic or historic information. None of the 12 identified high value sites are located on or near the Specific Plan Area.

However, unknown important paleontological resources have the potential to occur within the planning area including the undeveloped future growth areas which include the Specific Plan Area. The construction of new development would involve grading and other earthwork that can disturb important fossils. Therefore, the impact to paleontological resources is considered potentially significant. Implementation of the following mitigation measures would reduce the impact to unknown or otherwise undiscovered paleontological resources to a ***less than significant*** level.

Mitigation Measure 3.3-2: *If paleontological resources are discovered during the course of construction, work shall be halted immediately within 50 meters (165 feet) of the discovery, the City of Salinas shall be notified, and a qualified paleontologist shall be retained to determine the significance of the discovery. If the paleontological resource is considered significant, it should be excavated by a qualified paleontologist and given to a local agency, State University, or other applicable institution, where they could be curated and displayed for public education purposes.*

Impact 3.3-4: Project implementation may disturb human remains, including those interred outside of formal cemeteries (Less than Significant with Mitigation)

There are no human remains or known burial sites that were found during field surveys for the proposed project. Additionally, there are no human remains or known burial sites that have been identified in the Specific Plan Area on maps and files maintained by the Northwest Information Center (NWIC). There have been three previous cultural resource studies that examined approximately three-quarters of the Specific Plan Area and no human remains or known burial sites were documented. The Monterey County Historic Property Data File Directory and National Register of Historic Resources do not list any human remains or known burial sites in the Specific Plan Area.

It is not anticipated that ground disturbing activities would result in impacts to human remains or known burial sites given that none are believed to be present. However, as with most projects in California that involve ground disturbing activities, there is the potential for discovery of previously unknown human remains or known burial sites. The implementation of the following mitigation measure would ensure that this potential impact is reduced to a **less than significant** level.

Mitigation Measure 3.3-3*: If human remains are found during construction within the Specific Plan Area, or at off-site infrastructure improvement locations, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until a qualified archeological monitor and the coroner of Monterey County are contacted. If it is determined that the remains are Native American, the coroner shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent (MLD) from the deceased Native American. The MLD may then make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and associated grave goods as provided in Public Resources Code section 5097.98. The landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance if:*

a) *the Native American Heritage Commission is unable to identify a MLD or the MLD failed to make a recommendation within 24 hours after being notified by the commission;*
b) *the descendent identified fails to make a recommendation; or*
c) *the landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.*

Impact 3.3-5: The project may contribute to cumulative impacts on known and undiscovered cultural resources (Less than Cumulatively Considerable)

The cumulative setting for cultural resources includes the City of Salinas Planning Area and the surrounding unincorporated areas of Monterey County. While there are extensive documented cultural resources in Salinas and unincorporated Monterey County, there are no cultural resources that were found during field surveys for the proposed project. Additionally, there are no cultural resources that have been identified in the Specific Plan Area on maps and files maintained by the Northwest Information Center (NWIC). There have been three previous cultural resource studies that examined approximately three-quarters of the Specific Plan Area and no cultural resources were documented. The Monterey County Historic Property Data File Directory and National Register of Historic Resources do not list any cultural resources in the Specific Plan Area. Mitigation measures incorporated into this EIR would require the proposed project to evaluate any cultural resources discovered during construction activities. Any significant discoveries during construction would be required to be preserved, either through relocation or documentation and the project is not anticipated to considerably contribute to a significant reduction in cultural resources. Implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to cultural resources.

This page left intentionally blank.

This section discusses regional greenhouse gas (GHG) emissions, climate change, and energy conservation impacts that could result from implementation of the WASP. This section provides a background discussion of greenhouse gases and climate change linkages and effects of global climate change. This section also provides background discussion on the energy conservation components of the proposed project. This section is organized with an existing setting, regulatory setting, approach/methodology, and impact analysis. The analysis and discussion of the GHG, climate change, and energy impacts in this section focuses on the WASP's consistency with local, regional, statewide, and federal climate change planning and energy conservation efforts and discusses the context of these planning efforts as they relate to the WASP. Disclosures of the WASP's total estimated energy usage and greenhouse gas emissions are provided. It should be noted that the Monterey Bay Unified Air Pollution Control District (MBUAPCD) recently changed their name to Monterey Bay Air Resources District (MBARD). No comment letters regarding this topic were provided during the NOP comment period.

3.4.1 ENVIRONMENTAL SETTING

GREENHOUSE GASES AND CLIMATE CHANGE LINKAGES

Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation.

Naturally occurring greenhouse gases include water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also greenhouse gases, but they are, for the most part, solely a product of industrial activities. Although the direct greenhouse gases CO_2, CH_4, and N_2O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2011, concentrations of these three greenhouse gases have increased globally by 40, 150, and 20 percent, respectively (IPCC, 2013).

Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs).

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. In California, the transportation sector is the largest emitter of GHGs, followed by the industrial and electricity generation sectors (California Energy Commission, 2016).

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern,

respectively. California produced 441.5 million gross metric tons of carbon dioxide equivalents ($MMTCO_2e$) in 2014 (California Air Resources Board, 2016a). By 2020, under business as usual conditions, California is projected to produce 509 $MMTCO_2e$ per year (California Air Resources Board, 2014a).

Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2014, accounting for 37% of total GHG emissions in the state. This category was followed by the industrial sector (24%) and the electricity generation sector (20%) (California Air Resources Board, 2016a).

EFFECTS OF GLOBAL CLIMATE CHANGE

The effects of increasing global temperature are far-reaching and extremely difficult to quantify. The scientific community continues to study the effects of global climate change. In general, increases in the ambient global temperature as a result of increased GHGs are anticipated to result in rising sea levels, which could threaten coastal areas through accelerated coastal erosion, threats to levees and inland water systems and disruption to coastal wetlands and habitat.

If the temperature of the ocean warms, it is anticipated that the winter snow season would be shortened. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of supply for the state. The snowpack portion of the supply could potentially decline by 50% to 75% by the end of the 21st century (National Resources Defense Council, 2014). This phenomenon could lead to significant challenges securing an adequate water supply for a growing state population. Further, the increased ocean temperature could result in increased moisture flux into the state; however, since this would likely increasingly come in the form of rain rather than snow in the high elevations, increased precipitation could lead to increased potential and severity of flood events, placing more pressure on California's levee/flood control system.

Sea level has risen approximately seven inches during the last century and it is predicted to rise an additional 22 to 35 inches by 2100, depending on the future GHG emissions levels (California Environmental Protection Agency, 2010). If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion and disruption of wetlands. As the existing climate throughout California changes over time, mass migration of species, or failure of species to migrate in time to adapt to the perturbations in climate, could also result. Under the emissions scenarios of the Climate Scenarios report (California Environmental Protection Agency, 2010), the impacts of global warming in California are anticipated to include, but are not limited to, the following.

Public Health

Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation are projected to increase from 25% to 35% under the lower warming range and to 75% to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures will increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

Water Resources

A vast network of man-made reservoirs and aqueducts capture and transport water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snow pack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snow pack, increasing the risk of summer water shortages.

The state's water supplies are also at risk from rising sea levels. An influx of saltwater would degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta, a major state fresh water supply. Global warming is also projected to seriously affect agricultural areas, with California farmers projected to lose as much as 25% of the water supply they need; decrease the potential for hydropower production within the state (although the effects on hydropower are uncertain); and seriously harm winter tourism. Under the lower warming range, the snow dependent winter recreational season at lower elevations could be reduced by as much as one month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing, snowboarding, and other snow dependent recreational activities.

If GHG emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snow pack by as much as 70% to 90%. Under the lower warming scenario, snow pack losses are expected to be only half as large as those expected if temperatures were to rise to the higher warming range. How much snow pack will be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snow pack would pose challenges to water managers, hamper hydropower generation, and nearly eliminate all skiing and other snow-related recreational activities.

Agriculture

Increased GHG emissions are expected to cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. Although higher carbon dioxide levels can stimulate plant production and increase plant water-use efficiency, California's farmers will face greater water demand for crops and a less reliable water supply as temperatures rise.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures are likely to worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts, and milk.

Crop growth and development will be affected, as will the intensity and frequency of pest and disease outbreaks. Rising temperatures will likely aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

In addition, continued global warming will likely shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Should range contractions occur, it is likely that new or different weed species will fill the emerging gaps. Continued global warming is also likely to alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

Forests and Landscapes

Global warming is expected to alter the distribution and character of natural vegetation thereby resulting in a possible increased risk of large of wildfires. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the state. For example, if precipitation increases as temperatures rise, wildfires in southern California are expected to increase by approximately 30% toward the end of the century. In contrast, precipitation decreases could increase wildfires in northern California by up to 90%.

Moreover, continued global warming will alter natural ecosystems and biological diversity within the state. For example, alpine and sub-alpine ecosystems are expected to decline by as much as 60% to 80% by the end of the century as a result of increasing temperatures. The productivity of the state's forests is also expected to decrease as a result of global warming.

Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the state's coastal regions. Under the higher warming scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate coastal areas with

saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.

ENERGY CONSUMPTION

Energy is California is consumed from a wide variety of sources. Fossil fuels (including gasoline and diesel fuel, natural gas, and energy used to generate electricity) are most widely used form of energy in the State. However, renewable source of energy (such as solar and wind) are growing in proportion to California's overall energy mix. A large driver of renewable sources of energy in California is the State's current Renewable Portfolio Standard (RPS), which requires the State to derive at least 33% of electricity generated from renewable resources by 2020, and 50 percent by 2030.

Overall, in 2013, California's per capita energy usage was ranked 49th in the nation (U.S. EIA, 2016) (lower rank means lower per capita energy consumption). California's per capita rate of energy usage has remained relatively constant since the 1970's. Many State regulations since the 1970's, including new building energy efficiency standards, vehicle fleet efficiency measures, as well as growing public awareness, have helped to keep per capita energy usage in the State in check.

The consumption of non-renewable energy (i.e. fossil fuels) associated with the operation of passenger, public transit, and commercial vehicles, results in GHG emissions that contribute to global climate change. Alternative fuels such as natural gas, ethanol, and electricity (unless derived from solar, wind, nuclear, or other energy sources that do not produce carbon emissions) also result in GHG emissions and contribute to global climate change.

Electricity Consumption

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. In 2016, more than one-fourth of the electricity supply comes from facilities outside of the state. Much of the power delivered to California from states in the Pacific Northwest was generated by wind. States in the Southwest delivered power generated at coal-fired power plants, at natural gas-fired power plants, and from nuclear generating stations (U.S. EIA, 2017a) In 2016, approximately 50 percent of California's utility-scale net electricity generation was fueled by natural gas. In addition, about 25 percent of the state's utility-scale net electricity generation came from non-hydroelectric renewable technologies, such as solar, wind, geothermal, and biomass. Another 14 percent of the state's utility-scale net electricity generation came from hydroelectric generation, and nuclear energy powered an additional 11 percent. The amount of electricity generated from coal negligible (approximately 0.2 percent) (U.S. EIA, 2017a). The percentage of renewable resources as a proportion of California's overall energy portfolio is increasing over time, as directed the State's Renewable Portfolio Standard (RPS).

According to the California Energy Commission (CEC), total statewide electricity consumption increased from 166,979 gigawatt-hours (GWh) in 1980 to 228,038 GWh in 1990, which is an estimated annual growth rate of 3.66 percent. The statewide electricity consumption in 1997 was 246,225 GWh, reflecting an annual growth rate of 1.14 percent between 1990 and 1997 (U.S. EIA, 2017b). Statewide consumption was 274,985 GWh in 2010, an annual growth rate of 0.9 percent

between 1997 and 2010. In 2014, electricity consumption in Monterey County was 2,615 GWh (California Energy Commission, 2014).

Oil

The primary energy source for the United States is oil, which is refined to produce fuels like gasoline, diesel, and jet fuel. Oil is a finite, nonrenewable energy source. World consumption of petroleum products has grown steadily in the last several decades. As of 2016, world consumption of oil had reached 96 million barrels per day. The United States, with approximately five percent of the world's population, accounts for approximately 19 percent of world oil consumption, or approximately 18.6 million barrels per day (International Energy Agency, 2018). The transportation sector relies heavily on oil. In California, petroleum-based fuels currently provide approximately 96 percent of the state's transportation energy needs (California Energy Commission, 2012).

Natural Gas/Propane

The state produces approximately 12 percent of its natural gas, while obtaining 22 percent from Canada and 65 percent from the Rockies and the Southwest (California Energy Commission, 2012). In 2006, California produced 325.6 billion cubic feet of natural gas (California Energy Commission, 2012). PG&E is the largest publicly-owned utility in California and provides natural gas for residential, industrial, and agency consumers within the Monterey County area, including the City of Salinas. In 2014, natural gas consumption in Monterey County was 100 million therms (California Energy Commission, 2014).

3.4.2 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: NAAQS for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor National Ambient Air Quality Standards (NAAQS) vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The EPA is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the U.S. would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the Act, the

National Highway Traffic and Safety Administration, which is part of the U.S. Department of Transportation (USDOT), is responsible for establishing additional vehicle standards and for revising existing standards.

Since 1990, the fuel economy standard for new passenger cars has been 27.5 mpg. Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 mpg. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is determined on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the U.S. The Corporate Average Fuel Economy (CAFE) program, which is administered by the EPA, was created to determine vehicle manufacturers' compliance with the fuel economy standards. The EPA calculates a CAFE value for each manufacturer based on city and highway fuel economy test results and vehicle sales. Based on the information generated under the CAFE program, the USDOT is authorized to assess penalties for noncompliance.

Energy Policy Act of 1992 (EPAct)

The Energy Policy Act of 1992 (EPAct) was passed to reduce the country's dependence on foreign petroleum and improve air quality. EPAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAct requires certain federal, state, and local government and private fleets to purchase a percentage of light duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are included in EPAct. Federal tax deductions will be allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the act to consider a variety of incentive programs to help promote AFVs.

Energy Policy Act of 2005

The Energy Policy Act of 2005 was signed into law on August 8, 2005. Generally, the act provides for renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for a clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

Federal Climate Change Policy

According to the EPA, "the United States government has established a comprehensive policy to address climate change" that includes slowing the growth of emissions; strengthening science, technology, and institutions; and enhancing international cooperation. To implement this policy, "the Federal government is using voluntary and incentive-based programs to reduce emissions and has established programs to promote climate technology and science." The EPA administers multiple programs that encourage voluntary GHG reductions, including "ENERGY STAR", "Climate Leaders", and Methane Voluntary Programs. However, as of this writing, there are no adopted federal plans, policies, regulations, or laws directly regulating GHG emissions.

Mandatory Greenhouse Gas Reporting Rule

On September 22, 2009, EPA issued a final rule for mandatory reporting of GHGs from large GHG emissions sources in the United States. In general, this national reporting requirement will provide EPA with accurate and timely GHG emissions data from facilities that emit 25,000 metric tons or more of CO_2 per year. This publicly available data will allow the reporters to track their own emissions, compare them to similar facilities, and aid in identifying cost effective opportunities to reduce emissions in the future. Reporting is at the facility level, except that certain suppliers of fossil fuels and industrial greenhouse gases along with vehicle and engine manufacturers will report at the corporate level. An estimated 85% of the total U.S. GHG emissions, from approximately 10,000 facilities, are covered by this final rule.

STATE

Assembly Bill 1493

In response to AB 1493, the CARB approved amendments to the California Code of Regulations (CCR) adding GHG emission standards to California's existing motor vehicle emission standards. Amendments to CCR Title 13 Sections 1900 (CCR 13 1900) and 1961 (CCR 13 1961), and adoption of Section 1961.1 (CCR 13 1961.1) require automobile manufacturers to meet fleet average GHG emission limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes beginning with the 2009 model year. Emission limits are further reduced each model year through 2016. For passenger cars and light-duty trucks 3,750 pounds or less loaded vehicle weight (LVW), the 2016 GHG emission limits are approximately 37 percent lower than during the first year of the regulations in 2009. For medium-duty passenger vehicles and light-duty trucks 3,751 LVW to 8,500 pounds gross vehicle weight (GVW), GHG emissions are reduced approximately 24 percent between 2009 and 2016.

The CARB requested a waiver of federal preemption of California's Greenhouse Gas Emissions Standards. The intent of the waiver is to allow California to enact emissions standards to reduce carbon dioxide and other greenhouse gas emissions from automobiles in accordance with the regulation amendments to the CCRs that fulfill the requirements of AB 1493. The EPA granted a waiver to California to implement its greenhouse gas emissions standards for cars.

Assembly Bill 1007

Assembly Bill 1007, (Pavley, Chapter 371, Statutes of 2005) directed the CEC to prepare a plan to increase the use of alternative fuels in California. As a result, the CEC prepared the State Alternative Fuels Plan in consultation with the state, federal, and local agencies. The plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce greenhouse gas emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Bioenergy Action Plan – Executive Order #S-06-06

Executive Order #S-06-06 establishes targets for the use and production of biofuels and biopower and directs state agencies to work together to advance biomass programs in California while providing environmental protection and mitigation. The executive order establishes the following target to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels within California by 2010, 40 percent by 2020, and 75 percent by 2050. The executive order also calls for the state to meet a target for use of biomass electricity.

California Executive Orders S-3-05 and S-20-06, and Assembly Bill 32

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80% below the 1990 levels by the year 2050.

In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that the CARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team.

EO S-13-08

EO S-13-08 was issued on November 14, 2008. The EO is intended to hasten California's response to the impacts of global climate change, particularly sea level rise, and directs state agencies to take specified actions to assess and plan for such impacts, including requesting the National Academy of Sciences to prepare a Sea Level Rise Assessment Report, directing the Business, Transportation, and Housing Agency to assess the vulnerability of the State's transportation systems to sea level rise, and requiring the Office of Planning and Research and the Natural Resources Agency to provide land use planning guidance related to sea level rise and other climate change impacts.

The order also required State agencies to develop adaptation strategies to respond to the impacts of global climate change that are predicted to occur over the next 50 to 100 years. The adaption strategies report summarizes key climate change impacts to the State for the following areas: public health; ocean and coastal resources; water supply and flood protection; agriculture; forestry; biodiversity and habitat; and transportation and energy infrastructure. The report recommends strategies and specific responsibilities related to water supply, planning and land use, public health, fire protection, and energy conservation.

Assembly Bill 32 (AB 32) - Climate Change Scoping Plan

On December 11, 2008 the CARB adopted its first *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap of the CARB's plans to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California will implement to reduce CO_2e emissions by 169 million metric tons (MMT), or

approximately 30 percent, from the state's projected 2020 emissions level of 596 MMT of CO_2e under a business-as-usual scenario. (This is a reduction of 42 MMT CO_2e, or almost 10 percent, from 2002–2004 average emissions, but requires the reductions in the face of population and economic growth through 2020.) The Scoping Plan also breaks down the amount of GHG emissions reductions the CARB recommends for each emissions sector of the state's GHG inventory.

In May 2014, the CARB released and adopted the *First Update to the Climate Change Scoping Plan* to identify the next steps in reaching AB 32 goals and evaluate the progress that has been made between 2000 and 2012. A new version of the Scoping Plan was then published by the CARB in November 2017 (entitled *California's 2017 Climate Change Scoping Plan*). The 2017 Update expands the scope of the plan further by focusing on the strategy for achieving the state's 2030 GHG target of 40 percent emissions reductions below 1990 levels (to achieve the target codified into law by SB 32).

California Strategy to Reduce Petroleum Dependence (AB 2076)

In response to the requirements of AB 2076 (Chapter 936, Statutes of 2000), the CEC and the CARB developed a strategy to reduce petroleum dependence in California. The strategy, *Reducing California's Petroleum Dependence*, was adopted by the CEC and the CARB in 2003. The strategy recommends that California reduce on-road gasoline and diesel fuel demand to 15 percent below 2003 demand levels by 2020 and maintain that level for the foreseeable future; the Governor and Legislature work to establish national fuel economy standards that double the fuel efficiency of new cars, light trucks, and sport utility vehicles (SUVs); and increase the use of non- petroleum fuels to 20 percent of on-road fuel consumption by 2020 and 30 percent by 2030.

Climate Action Program at Caltrans

The California Department of Transportation, Business, Transportation, and Housing Agency, prepared a Climate Action Program in response to new regulatory directives. The goal of the Climate Action Program is to promote clean and energy efficient transportation, and provide guidance for mainstreaming energy and climate change issues into business operations. The overall approach to lower fuel consumption and CO_2 from transportation is twofold: (1) reduce congestion and improve efficiency of transportation systems through smart land use, operational improvements, and Intelligent Transportation Systems; and (2) institutionalize energy efficiency and GHG emission reduction measures and technology into planning, project development, operations, and maintenance of transportation facilities, fleets, buildings, and equipment.

The reasoning underlying the Climate Action Program is the conclusion that "the most effective approach to addressing GHG reduction, in the short-to-medium term, is strong technology policy and market mechanisms to encourage innovations. Rapid development and availability of alternative fuels and vehicles, increased efficiency in new cars and trucks (light and heavy duty), and super clean fuels are the most direct approach to reducing GHG emissions from motor vehicles (emission performance standards and fuel or carbon performance standards)."

Governor's Low Carbon Fuel Standard (Executive Order #S-01-07)

Executive Order #S-01-07 establishes a statewide goal to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020 through establishment of a Low Carbon Fuel Standard. The Low Carbon Fuel Standard is incorporated into the State Alternative Fuels Plan and is one of the proposed discrete early action GHG reduction measures identified by the CARB pursuant to AB 32.

Senate Bill 97 (SB 97)

Senate Bill 97 (Chapter 185, 2007) required the Governor's Office of Planning and Research (OPR) to develop recommended amendments to the State CEQA Guidelines for addressing greenhouse gas emissions. OPR prepared its recommended amendments to the State CEQA Guidelines to provide guidance to public agencies regarding the analysis and mitigation of greenhouse gas emissions and the effects of greenhouse gas emissions in draft CEQA documents. The Amendments became effective on March 18, 2010.

Senate Bill 375

Sen. Bill No. 375 (Stats. 2008, ch. 728) (SB 375) was built on AB 32 (California's 2006 climate change law). SB 375's core provision is a requirement for regional transportation agencies to develop a Sustainable Communities Strategy (SCS) in order to reduce GHG emissions from passenger vehicles. The SCS is one component of the Regional Transportation Plan (RTP).

The SCS outlines the region's plan for combining transportation resources, such as roads and mass transit, with a realistic land use pattern, in order to meet a state target for reducing GHG emissions. The strategy must take into account the region's housing needs, transportation demands, and protection of resource and farmlands.

Additionally, SB 375 modified the state's Housing Element Law to achieve consistency between the land use pattern outlined in the SCS and the Regional Housing Needs Assessment allocation. The legislation also substantially improved cities' and counties' accountability for carrying out their housing element plans.

Finally, SB 375 amended the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) to ease the environmental review of developments that help reduce the growth of GHG emissions.

California Building Energy Efficiency Standards

Title 24, Part 6 of the California Code of Regulations, known as the Building Energy Efficiency Standards, was established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. On January 1, 2010, the California Building Standards Commission adopted CALGreen and became the first state in the United States to adopt a statewide green building standards code. CALGreen requires new buildings to reduce

water consumption by 20 percent, divert 50 percent of construction waste from landfills, and install low pollutant-emitting materials. This standard was updated in 2013 and again in 2016.

Executive Order B-30-15 and SB 32

On April 29, 2015, Governor Jerry Brown issued EO B-30-15, which establishes a State GHG reduction target of 40 percent below 1990 levels by 2030. The new emission reduction target provides for a mid-term goal that would help the State to continue on course from reducing GHG emissions to 1990 levels by 2020 (per AB 32) to the ultimate goal of reducing emissions 80 percent under 1990 levels by 2050 (per EO S-03-05). This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2 degrees Celsius – the warming threshold at which scientists say there will likely be major climate disruptions. EO B-30-15 also addresses the need for climate adaptation and directs State government to:

- Incorporate climate change impacts into the State's Five-Year Infrastructure Plan;
- Update the Safeguarding California Plan, the State climate adaptation strategy, to identify how climate change will affect California infrastructure and industry and what actions the State can take to reduce the risks posed by climate change;
- Factor climate change into State agencies' planning and investment decisions; and
- Implement measures under existing agency and departmental authority to reduce GHG emissions.

On September 8, 2016, Governor Jerry signed SB 32, which requires the State to ensure that statewide greenhouse gas emissions are reduced by 40% below 1990 levels by 2030. This legislation allows the State to adopt rules and regulations to achieve the maximum, technologically feasible, and cost-effective greenhouse gas emissions reductions for the 2030 target year.

CEQA Guidelines Appendix F

In order to assure that energy implications are considered in project decisions, the California Environmental Quality Act requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy. The goal of conserving energy implies the wise and efficient use of energy.

LOCAL

Association of Monterey Bay Area Governments (AMBAG) Energy & Climate Action Planning Program

The Draft Energy Action Strategies developed by AMBAG Energy Watch are meant to highlight the potential savings that can be achieved through various energy actions, and provide insights for decision-makers in each jurisdiction. For those jurisdictions who ultimately decide to develop and

adopt comprehensive Climate Action Plans, the initiatives comprising the Energy Action Strategies can be easily and efficiently integrated into the energy chapter(s) of the Climate Action Plans.

2008 Monterey Bay Regional Energy Plan

The Regional Energy Plan Program was a collaboration effort in 2008 to create a comprehensive Energy Efficiency Plan for the Monterey Bay Area, encompassing AMBAG's areas of service in the Monterey, San Benito, and Santa Cruz Counties. AMAG's Energy Advisory Committee worked with energy experts to write the Plan. The Advisory Committee is made up of representatives from the local cities and counties, as well as local business, and industry. The original Monterey Bay Regional Energy Plan published in laid out a set of four Plan objectives, goals and action steps for the region. The region has made significant progress toward the original 2006 plan's objectives, with progress for each outlined within the 2008 Plan.

City of Salinas GHG Emissions Inventory

In association with Local Governments for Sustainability, AMBAG has assisted a number of local communities in the preparation of GHG emissions baseline inventories. The City of Salinas participated in this effort. In 2011, AMBAG produced the *City of Salinas Greenhouse Gas Emissions Inventory 2005 Baseline Report*. The baseline report provides data on the City's 2005 emissions baseline volumes generated by community activities (i.e. land use development) and by municipal operations. Total 2005 GHG emissions were estimated at 804,444 MT CO_2e. Emissions from commercial and industrial development were estimated at 271,143 MT CO_2e. The commercial and industrial emissions include only those related to the consumption of electricity and natural gas and do not include emissions from associated transportation or waste disposal/management.

City of Salinas General Plan

The Salinas General Plan establishes the following policies relative to greenhouse gas emissions and/or energy conservation in the General Plan:

Conservation/Open Space Element

Policy COS-6.1: Cooperate with the Monterey Bay Unified Air Pollution Control District to implement the Air Quality Plan.

Policy COS-6.2: Implement measures to protect air quality that may be required to mitigate the effects of population growth.

Policy COS-6.3: Encourage development design that maintains air quality and reduces direct and indirect emissions of air contaminates.

Policy COS-6.4: Support alternative modes of transportation, such as walking, biking and public transit, and develop bike- and pedestrian-friendly neighborhoods to reduce emissions associated with automobile use.

Policy COS-8.1: Enforce State Title 2 4 building construction requirements.

Policy COS-8.2: Apply standards that promote energy conservation in new and existing development.

Policy COS-8.3: Work with energy suppliers and distributors to implement energy conservation programs and help inform the public of these programs.

Policy COS-8.4: Participate in programs that promote energy conservation.

Policy COS-8.5: Encourage land use arrangements and densities that facilitate the use of energy efficient public transit.

Policy COS-8.6: Encourage the creation and retention of neighborhood-level services (e.g., family medical offices, dry cleaners, grocery stores, drug stores) throughout the City in order to reduce energy consumption through automobile use.

Safety Element

Policy S-3.1: To reduce the risk posed by air pollution, work with responsible federal, state, and county agencies to decrease air pollution emissions occurring within the air basin.

Land Use Element

Policy LU-1.1: Achieve a balance of land uses to provide for a range of housing, jobs, libraries, and educational and recreational facilities that allow residents to live, work, shop, learn, and play in the community.

Community Design Element

Policy CD-3.1: Create and preserve distinct, identifiable neighborhoods that have traditional neighborhood development (TND) characteristics. Specifically, each neighborhood should have the following characteristics:

- An approximately 5-minute walk from perimeter to center;
- Housing densities should increase from perimeter to center (i.e., neighborhoods should be more densely populated at the center);
- The neighborhood center should be the location of retail space, office space, and upper story residential above commercial and office space;
- A civic or public space such as a plaza or park should be at the neighborhood center;
- Small parks should be distributed throughout the neighborhood;
- Schools should lie within the neighborhood and be easily accessible and within walking distance;
- When not adjacent to agricultural operations, which may require a variety of buffering techniques, the neighborhood edge should be bordered by either a natural corridor or the edge of an adjacent neighborhood across a pedestrian-friendly boulevard; and
- Front yard setbacks should decrease from neighborhood edge to neighborhood center.

City of Salinas Municipal Code

Section 31-804.18 of the Municipal Code (*Energy Conservation*) requires that the design of a subdivision for which a tentative map is required shall provide, to the extent feasible, for future pass or natural heating or cooling opportunities in the subdivision.

3.4.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE (GREENHOUSE GASES)

Consistent with Appendix G of the CEQA Guidelines, climate change-related impacts are considered significant if implementation of the WASP would do any of the following:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The vast majority of individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence to climate change; therefore, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15355).

For future projects, the significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds, or consistency with a regional GHG reduction plan (such as a Climate Action Plan).

CEQA Direction

In 2008, the Schwarzenegger administration issued guidance regarding assessing significance of GHGs in CEQA documents; that guidance stated that the adoption of appropriate significance thresholds was a matter of discretion for the lead agency. The guidance states:

> "[T]he global nature of climate change warrants investigation of a statewide threshold of significance for GHG emissions. To this end, OPR has asked the CARB technical staff to recommend a method for setting thresholds which will encourage consistency and uniformity in the CEQA analysis of GHG emissions throughout the state. Until such time as state guidance is available on thresholds of significance for GHG emissions, we recommend the following approach to your CEQA analysis."
>
> **Determine Significance**
>
> - When assessing a project's GHG emissions, lead agencies must describe the existing environmental conditions or setting, without the project, which normally

constitutes the baseline physical conditions for determining whether a project's impacts are significant.

- As with any environmental impact, lead agencies must determine what constitutes a significant impact. In the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a "significant impact," individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice.

- The potential effects of a project may be individually limited but cumulatively considerable. Lead agencies should not dismiss a proposed project's direct and/or indirect climate change impacts without careful consideration, supported by substantial evidence. Documentation of available information and analysis should be provided for any project that may significantly contribute new GHG emissions, either individually or cumulatively, directly or indirectly (e.g., transportation impacts).

- Although climate change is ultimately a cumulative impact, not every individual project that emits GHGs must necessarily be found to contribute to a significant cumulative impact on the environment. CEQA authorizes reliance on previously approved plans and mitigation programs that have adequately analyzed and mitigated GHG emissions to a less than significant level as a means to avoid or substantially reduce the cumulative impact of a project.

CEQA Guidelines Section 15064.4 was later added, in 2010, to address GHGs. The Guidelines state:

(a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project.

(b) A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:

(1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;

(2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;

(3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and

> must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

Thus, one threshold that may be used to analyze the project's GHG emissions is whether the project would conflict with or obstruct the goals or strategies of the California Global Warming Solutions Act of 2006 (AB 32) or its governing regulation (Sections 38500-38599 of the Health & Safety Code).

The OPR Guidance did not require Executive Order S-3-05 to be used as a significance threshold under CEQA. Rather, OPR recognized that, until the CARB establishes a statewide standard, selecting an appropriate threshold was within the discretion of the lead agency.

The OPR Guidance did not include a quantitative threshold of significance to use for assessing a project's GHG emissions under CEQA. Moreover, the CARB has not established such a threshold or recommended a method for setting a threshold for project-level analysis. In the absence of a consistent statewide threshold, the County in consultation with the MBARD, has provided a threshold of significance for analyzing the proposed project's GHG emissions. The issue of setting a GHG threshold is complex and dynamic, especially in light of the California Supreme Court decision in Center for Biological Diversity v. California Department of Fish and Wildlife (referred to as the Newhall Ranch decision hereafter). The Supreme Court ruling highlighted the need for the threshold being tailored to the specific project, its location, and the surrounding setting. Therefore, the threshold used to analyze the proposed project is specific to the analysis herein.

Prior to the Newhall Ranch decision, analysis involved comparison of the project emissions to a "no action taken" (NAT) scenario. In the Newhall Ranch decision, the court found that, although comparison of a project to NAT (or "business as usual") may be appropriate in concept, the comparison of a specific local project against a statewide business as usual scenario is not an analogous comparison. Specifically, the Court stated that the business as usual approach would need to be based on a substantial evidence-supported link between data in the Scoping Plan and the project, at its proposed location, to demonstrate consistency of a project's reductions with statewide goals. It should be noted that, based on current data available, it is not possible, within the structure of the Scoping Plan sectors, to develop the evidence to reliably relate a specific land use development project's reductions to the Scoping Plan's statewide goal, as envisioned by the Court. Based on the court's finding, the NAT approach is now considered problematic and is no longer recommended. Therefore, consistent with direction from the MBARD, this DEIR analysis replaces the former MBUACPD threshold with a threshold that is consistent with the Newhall Ranch decision. This consists of evaluating the consistency of a project's GHG efficiency with California's GHG reduction targets. In light of the Newhall Ranch decision, efficiency metrics were developed to assess the project's consistency with California's adopted GHG reduction targets for 2030 and 2050 under AB 32.

Monterey Bay Air Resources District (MBARD)

The MBARD has previously recommended that lead agencies use the GHG emission thresholds of significance for evaluating construction- and operation-related GHG emissions adopted by the San Luis Obispo County Air Pollution Control District (SLO County APCD) available in the SLO County APCD CEQA Air Quality Handbook, last updated in 2012[1]. These thresholds were developed for San Luis Obispo County, and incorporate locally-based data. The thresholds provided by the SLO County APCD include a mass emissions bright-line threshold of 1,150 MT CO_2e/year and a per capita threshold of 4.9 MT CO_2e/service population (SP)/year. These metrics represent the rate of emissions for projects in SLO County needed to achieve a fair share of the state's emissions mandate embodied in the AB 32 Year 2020 target. The use of "fair share" in this instance indicates the GHG efficiency level that, if applied statewide, would meet the AB 32 Year 2020 emissions target and support efforts to reduce emissions beyond 2020. The intent of AB 32 is to accommodate population and economic growth in California, but do so in a way that achieves a lower rate of GHG emissions. SLO County APCD also developed its bright-line threshold of 1,150 MT CO2e/year based on the following steps: (1) estimate overall statewide growth in GHG emissions; (2) estimate statewide "off-inventory" GHG reductions; (3) calculate the statewide GHG emission gap; (4) apply the statewide gap to the SLO County Regional Land Use Emissions Inventory; (5) evaluate historical land use development trends in SLO County to estimate potential future development; (6) project the level of new development expected in SLO County by 2020; (7) estimate the GHG emissions reductions needed from future development in SLO County; (8) determine the threshold level needed to close the regional gap of 13,788 MT CO_2e/year. Following a similar process, the SLOAPCD developed a per capita GHG emissions threshold of 4.9 MT CO_2e/SP/year.

In light of the Newhall Ranch decision, an independent efficiency metric was calculated by De Novo Planning Group in coordination with the MBARD to assess the project's consistency with California's adopted GHG reduction targets for 2020 AB 32 (given that the SLO County APCD per capita thresholds was developed prior to the Newhall Ranch decision). It was found, based on this independent calculation, that a per capita threshold of 4.84 MT CO_2e/SP/year in 2020 would be the appropriate threshold for projects in California for the Year 2020. This independent efficiency metric is similar to the aforementioned efficiency metric calculated by the SLO County APCD. De Novo Planning Group developed the 4.84 MT CO_2e/SP/year in 2020 threshold based on emissions for the land use-driven emission sectors in the CARB GHG Inventory. This approach to developing a GHG efficiency metric is only based on sectors that would accommodate projected growth (as indicated by population and employment growth) while allowing for consistency with the goals of AB 32. More specifically, this per service population efficiency target is based on the AB 32 GHG reduction target and GHG emissions inventory prepared for the CARB's Scoping Plan. The land-used sector driven inventory for 1990 was divided by the population and employment projections for California in 2020. This efficiency metric allows the threshold to be applied evenly to all project types (residential, commercial/retail and mixed use) and uses an emissions inventory comprised only of sources from land-use related sectors. The efficiency approach allows lead agencies to assess whether any given

[1] Correspondence with MBARD Engineer David Frisbey, on 2/29/2016 (11:30 am).

project or plan would accommodate population and employment growth in a way that is consistent with the emissions limit established under AB 32.

Since this independently-generated GHG efficiency threshold for the State of California would be applicable statewide, this approach to establishing efficiency thresholds is utilized for this analysis for operational emissions. The high level of similarity between the Year 2020 SLO County APCD GHG efficiency metric, and the independently derived Year 2020 metric provides for further reliability that this numerical value of 4.84 MT CO_2e/SP/year for 2020 would be an appropriate threshold for projects in California.

However, buildout of the proposed project is not likely to occur until 2035. Therefore, efficiency thresholds for buildout Year 2035 and for long-term future Year 2050 were also derived, following the same methodology as utilized to derive the 2020 efficiency threshold. The CARB has indicated that an average statewide GHG reduction of 5.2 percent per year from 2020 through 2050 would be necessary to achieve the state's 2050 target of an 80% reduction in GHGs below 1990 levels (CARB, 2016). This annual percentage reduction was utilized as a basis for developing the per capita efficiency thresholds for buildout Year 2035 and long-term future Year 2050. Thresholds for these two years were estimated by applying a uniform reduction from the CARB's 1990 emissions inventory and dividing the resultant value by the projected population and employment for each future year (see Appendix B for detailed calculations). The derived per capita thresholds for Year 2035 is 1.94 MT CO_2e/SP/year in 2035, and for Year 2050 is 0.80 MT CO_2e/SP/year.

The proposed project is anticipated to be built out in the medium-term (i.e., 2035), within the timeframe for the state's longer-term target years (2030 and 2050). While a statewide GHG reduction plan to achieve the post-2020 reduction targets of SB 32 and Executive Orders S-03-05 and B-30-15 has not been adopted, the County bases its post-2020 significance determination for this proposed project on the 2035 (anticipated buildout year) and 2050 (long-term horizon) analysis provided herein. Analysis of project emissions at buildout is consistent with current CEQA practice and available guidance for air districts on analyzing emissions from the first fully operational year.

If the project's estimated GHG emissions per service population in 2035 and 2050 are equal to or less than these derived efficiency thresholds, the impact would be considered less than significant for the AB 32 target years. The post-2020 GHG efficiency metrics were derived based on the reduction trajectory the State of California needs to maintain to achieve its 2030 and 2050 goals (5.2 percent reduction per year) (CARB, 2016). Therefore, if the project's emissions are determined to be on this trajectory based on compliance with the derived 2035 and 2050 GHG emissions per service population goals, the proposed project would not be anticipated to interfere with the state's long-term GHG reduction goals.

Conclusion

The MBARD had previously recommended using the adopted SLO County APCD quantitative emissions bright-line threshold of 1,150 MT CO_2e per year, or the SLO County APCD per capita emissions threshold of 4.9 MT CO_2e/SP/year for year 2020 for most land use projects. However, independently calculated per capita emissions thresholds were derived, in conformance with the

Newhall Ranch decision, based on the GHG emissions included for land use-based sectors within California's 1990 GHG Inventory and future-year population and employment projections. These independently calculated per capita emissions thresholds (for Years 2035 and 2050) are utilized for the evaluation of operation-related emissions. Therefore, in compliance with the Newhall Ranch decision, the project's contribution to cumulative impacts related to GHG emissions and climate change would be cumulatively considerable if the project would produce more than 1,150 MT CO_2e per year in construction-related emissions, or 1.94 MT CO_2e/SP/year in 2035, or 0.80 MT CO_2e/SP/year in 2050, in operation-related emissions. In addition, a project that contributes to a net decrease in GHG emissions and is consistent with the reduction goals of AB 32 is presumed to have a less than significant GHG impact.

Based on the discussion above, the following thresholds are applied to this analysis:

- For the evaluation of construction-related emissions, the SLO County APCD-recommended mass emission threshold of 1,150 metric tons of CO_2e per year is used.
- For the evaluation of operation-related emissions, for year 2035, the independently derived per capita emissions threshold of 1.94 MT CO_2e/service population/year is used.
- For the evaluation of operation-related emissions, for year 2050, the independently derived per capita emissions threshold of 0.80 MT CO_2e/service population/year is used.

THRESHOLDS OF SIGNIFICANCE (CEQA GUIDELINES APPENDIX F)

Consistent with Appendix F of the CEQA Guidelines, energy-related impacts are considered significant if implementation of the WASP would do the following:

- Result in significant adverse impacts related to project energy requirements, energy use inefficiencies, and/or energy intensiveness of materials by amount and fuel type for each stage of the project including construction, operations, maintenance, and/or removal;
- Result in significant adverse impacts on local and regional energy supplies and on requirements for additional capacity;
- Result in significant adverse impacts on peak and base period demands for electricity and other forms of energy;
- Fail to comply with existing energy standards;
- Result in significant adverse impacts on energy resources;
- Result in significant adverse impacts related to transportation energy use requirements of the project and use of transportation alternatives; or
- Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to energy conservation.

In order to determine whether or not the proposed project would result in a significant impact on energy use, this EIR includes an analysis of proposed project energy use, as provided under *Impacts and Mitigation Measures* below.

IMPACTS AND MITIGATION MEASURES

Impact 3.4-1: Potential to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment (Significant and Unavoidable)

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. A project's GHG emissions are at a micro-scale relative to global emissions, but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. Implementation of the WASP would contribute to increases of GHG emissions that are associated with global climate change. Estimated GHG emissions attributable to future development would be primarily associated with increases of CO_2 and other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O), from mobile sources and utility usage.

The WASP's short-term construction-related and long-term operational GHG emissions were estimated using the California Emission Estimator Model (CalEEMod)^{TM} (v.2016.3.2). CalEEMod is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify GHG emissions from land use projects. The model quantifies direct GHG emissions from construction and operation (including vehicle use), as well as indirect GHG emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Emissions are expressed in annual metric tons of CO_2 equivalent units of measure (i.e., MT CO_2e), based on the global warming potential of the individual pollutants.

Short-Term Construction GHG Emissions: Estimated unmitigated GHG emissions associated with construction of the WASP are summarized in Table 3.4-1. These emissions include all worker vehicle, vendor vehicle, hauler vehicle, and off-road construction vehicle GHG emissions. For the purposes of this analysis, based on input from the project applicant, the proposed project is assumed to commence construction in 2019 and occur through 2035, and full buildout of the Plan Area would be completed by 2035. It should be noted that this schedule is an approximation and may change over time. Buildout of the Specific Plan Area would occur based on market conditions, and therefore the pace of construction is expected to vary over time. Nevertheless, a regularized construction schedule was utilized for modelling purposes for the sake of simplicity. It should also be noted that the results provided in Table 3.4-1 incorporates the CalEEMod default assumptions for off-road construction equipment, which tend to represent an overestimate of project off-road construction equipment needs. Emission results in Table 3.4-1 therefore represent a conservative estimate of project construction-related GHG emissions.

TABLE 3.4-1: CONSTRUCTION GHG EMISSIONS (UNMITIGATED AVERAGE MT CO_2E/YEAR)

	Bio-CO_2	*Non-Bio-CO_2*	*Total CO_2*	*CH_4*	*N_2O*	*CO_2e*
2019	0	394.1	394.1	0.1	0	397.1
2020	0	12,162.3	12,162.3	0.6	0	12,177.3
2021	0	11,996.4	11,996.4	0.6	0	12,010.5
2022	0	11,688.1	11,688.1	0.5	0	11,701.3
2023	0	11,373.1	11,373.1	0.5	0	11,384.6
2024	0	11,200.3	11,200.3	0.4	0	11,211.3
2025	0	10,903.0	10,903.0	0.4	0	10,913.5
2026	0	10,657.0	10,657.0	0.4	0	10,666.9
2027	0	10,458.9	10,458.9	0.4	0	10,468.5
2028	0	10,245.0	10,245.0	0.4	0	10,254.2
2029	0	10,129.8	10,129.8	0.4	0	10,138.7
2030	0	10,035.4	10,035.4	0.3	0	10,042.5
2031	0	9,918.2	9,918.2	0.3	0	9,925.1
2032	0	9,855.7	9,855.7	0.3	0	9,862.3
2033	0	9,695.3	9,695.3	0.3	0	9,701.7
2034	0	9,622.6	9,622.6	0.2	0	9,628.8
2035	0	8,244.7	8,244.7	0.2	0	8,250.0
Total	**0**	**168,579.9**	**168,579.9**	**6.3**	**0**	**168,734.3**
Annual Maximum	**0**	**12,162.3**	**12,162.3**	**0.6**	**0**	**12,177.3**

SOURCES: CALEEMOD (V.2016.3.2)

As presented in the table, short-term construction emissions of GHG associated are estimated to be a total of 168,734.3 MT CO_2e. This reflects a low of 397.1 in 2019 and a high of 12,177.3 MT CO_2e in 2020, emitted during each of the construction years (2019 through 2035). Construction GHG emissions tend to be highest during years when building construction activities would occur, as opposed to site preparation or other construction activities. As shown in Table 3.4-1, the proposed project's construction emissions would exceed the mass emissions threshold of 1,150 MT CO_2e/year for nearly all years of construction.

Long-Term Operational GHG Emissions: The long-term operational GHG emissions estimate for the WASP incorporates potential area source and vehicle emissions, and emissions associated with utility and water usage, and wastewater and solid waste generation.

Estimated GHG emissions associated with the WASP in 2035 are summarized in Table 3.4-2 and 3.4-3, below. As shown in the following tables, the annual 2035 GHG emissions associated with the WASP would be approximately 51,939.2 MT CO_2e without any mitigation incorporated and 47,684.9 MT CO_2e with mitigation incorporated into the proposed project (as provided by CalEEMod). These mitigation measures therefore represent a decrease of 4,254.3 MT CO_2e in year 2035.

TABLE 3.4-2: OPERATIONAL GHG EMISSIONS 2035 (UNMITIGATED METRIC TONS/YEAR)

	Bio- CO_2	*NBio- CO_2*	*Total CO_2*	*CH_4*	*N_2O*	*CO_2e*
Area	661.2	748.6	1,409.8	0.9	0.1	1,448.4
Energy	0	14,718.3	14.718.3	0.9	0.3	14,836.9
Mobile	0	29,989.3	29,989.3	1.2	0	30,020.5
Waste	1,843.5	0	1,843.5	108.9	0	4,567.1
Water	145.0	439.1	584.1	15.0	0.4	1,066.5
Total	**2,649.7**	**45,895.3**	**48,545.0**	**126.9**	**0.7**	**51,939.2**

SOURCES: CALEEMOD (V.2016.3.2)

TABLE 3.4-3: OPERATIONAL GHG EMISSIONS 2035 (MITIGATED METRIC TONS/YEAR)

	Bio- CO_2	*NBio- CO_2*	*Total CO_2*	*CH_4*	*N_2O*	*CO_2e*
Area	0	1,080.9	1,080.9	0.1	<0.1	1,088.6
Energy	0	14,718.3	14,718.3	0.9	0.3	14,836.9
Mobile	0	26,283.3	26,283.3	1.1	0	26,311.7
Waste	1,843.5	0	1,843.5	108.9	0	4,567.1
Water	116.0	378.4	494.4	12.0	0.3	880.6
Total	**1,959.5**	**40,844.8**	**44,420.4**	**123.1**	**0.6**	**47,684.9**

SOURCES: CALEEMOD (V.2016.3.2)

Estimated GHG emissions associated with the WASP in 2050 are summarized in Table 3.4-4 and 3.4-5, below. It should be noted that the same RPS standard as estimated for year 2035 was estimated for year 2050. Additionally, CalEEMod is highly limited to the extent that it can account for year 2050 reductions in GHG emissions, given the long timeframe involved. Given emerging technologies (such as affordable electric vehicles) and the high likelihood of increased federal and/or state regulation between 2035 and 2050, per capita emissions are likely to decrease further over this timeframe. Therefore, the year 2050 emissions results represent a conservative estimate. As shown in the following tables, the annual 2050 GHG emissions associated with the WASP would be approximately 50,825.0 MT CO_2e without any mitigation incorporated and 46,779.4 MT CO_2e with mitigation incorporated into the proposed project (as provided by CalEEMod). These mitigation measures therefore represent a decrease of 4,045.6 MT CO_2e in year 2050.

It should also be noted that the proposed project incorporates some features into the design of the Plan Area that CalEEMod considers as "mitigation". Therefore, the unmitigated scenario (in Table 3.4-2) below further acts as a conservative estimate of unmitigated Plan Area emissions.

TABLE 3.4-4: OPERATIONAL GHG EMISSIONS 2050 (UNMITIGATED METRIC TONS/YEAR)

	Bio- CO_2	*NBio- CO_2*	*Total CO_2*	*CH_4*	*N_2O*	*CO_2e*
Area	661.2	748.6	1,409.8	0.9	0.1	1,448.4
Energy	0	14,718.3	14.718.3	0.9	0.3	14,836.9
Mobile	0	29,879.2	29,879.2	1.1	0	28,906.2
Waste	1,843.5	0	1,843.5	108.9	0	4,567.1
Water	145.0	439.1	584.1	15.0	0.4	1,066.5
Total	**2,649.7**	**44,785.2**	**47,434.9**	**126.8**	**0.7**	**50,825.0**

SOURCES: CALEEMOD (V.2016.3.2)

TABLE 3.4-5: OPERATIONAL GHG EMISSIONS 2050 (MITIGATED METRIC TONS/YEAR)

	Bio- CO_2	*NBio- CO_2*	*Total CO_2*	*CH_4*	*N_2O*	*CO_2e*
Area	0	1,080.9	1,080.9	0.1	<0.1	1,088.6
Energy	0	14,718.3	14,718.3	0.9	0.3	14,836.9
Mobile	0	25,381.5	25,381.5	1.0	0	25,406.2
Waste	1,843.5	0	1,843.5	108.9	0	4,567.1
Water	116.0	378.4	494.4	12.0	0.3	880.6
Total	**1,959.5**	**41,559.1**	**43,518.6**	**122.9**	**0.6**	**46,779.4**

SOURCES: CALEEMOD (V.2016.3.2)

The significance thresholds for GHG emissions should be related to compliance with AB 32, and the City of Salinas, as lead agency, has chosen to utilize a threshold of significance for GHG emissions based on the guidance from the MBARD and the City of Salinas, and as required by the Newhall Ranch decision. This threshold was independently derived by De Novo Planning Group, based on statewide GHG emissions and future-year employment and population projections. The rationale for using this threshold is outlined in the previous subsection, entitled "Thresholds of Significance".

According to the project applicant, the proposed project is anticipated to include approximately 15,928 residents at project buildout (in Year 2035). The proposed project would also have approximately 857 employees at project buildout (based on 571,500 total square feet of mixed use commercial at project buildout[2], and an employment density factor of 667 square feet per worker[3]). Therefore, with a total projected service population of 16,785 at full buildout (in Year 2035), unmitigated operational GHG emissions of 51,939.2 MT CO_2e, and mitigated operational GHG emissions of 47,684.9 MT CO_2e, the proposed project would generate approximately 3.09 MT CO_2e/service population/year (in Year 2035), for operational emissions, under the unmitigated scenario. Under the mitigated scenario, the proposed project would generate approximately 2.84 MT CO_2e/service population/year (in Year 2035). These values are above the derived threshold of 1.94 MT CO_2e/service population/year for Year 2035.

For the purposes of this analysis, the service population in Year 2050 is assumed to be same as in buildout Year 2035. Under such a scenario, unmitigated GHG emissions per service population in

[2] As provided by the project applicant: see Table 3 of the Initial Study for Salinas WASP (proposed project).
[3] As provided in Table 2 of the City of Salinas Nexus Studies Overview and Summary (February, 2016), for the "Retail/Restaurant/Personal Services" land use type.

Year 2050 would be approximately 3.03 MT CO_2e/service population/year, and mitigated GHG emissions remain 2.79 MT CO_2e/service population/year. However, the service population threshold applied for Year 2050 is lower than in Year 2035, at 0.80 MT CO_2e/service population/year (and therefore more difficult at to achieve as compared to Year 2035). The GHG emissions modelled for Year 2050 would exceed this threshold by a substantial margin.

As described above, it is expected that the proposed project's GHG efficiency in the Year 2050 would be improved beyond that of Year 2035, given the high likelihood of technological progress of the next approximately thirty years, which would provide opportunities for additional reductions in per capita GHG emissions. One example of this is the likelihood of substantially increased electrification of vehicles from 2035 to 2050. Additionally, regulatory trends, such as increases in state renewable energy procurement requirements (i.e. the State RPS) may reduce per capita emissions from the use of electricity even further from 2035 to 2050, which would have a large effect on overall per capita GHG emissions of projects in California. Overall, full implementation of the *California's 2017 Climate Change Scoping Plan* by Year 2050 would greatly reduce GHG emissions in California. While it is unknown at this time what kind of technological innovations and/or additional regulatory standards would reduce GHG emissions from 2035 to 2050, and by what amount, it is expected that the per capita GHG efficiency of the proposed project in 2050 would be substantially lower than that as modelled by CalEEMod.

Conclusion: Short-term construction GHG emissions are a one-time release of GHGs and are not expected to significantly contribute to global climate change over the lifetime of the WASP. Additionally, the implementation of the mitigation measures presented in Section 3.1: Air Quality would reduce the overall annual GHG emissions associated with the WASP.

The mitigation measures presented in Section 3.1: Air Quality require traffic calming measures, preferential carpool/vanpool parking spaces, and other actions meant to reduce vehicle miles travelled. The mitigation measure provided in Section 3.1: Air Quality require the consideration and implementation of feasible alternative energy infrastructure within the Plan area. The mitigation measures presented in Section 3.1: Air Quality also ensure that the project proponent would consider and implement feasible strategies to encourage alternative energy use (e.g. solar PV) within the Plan Area. The proposed project would be required to use water efficient fixtures in all buildings, utilize water-efficient irrigation systems, as well as coordinate with the MBARD to consider the implementation of bicycle rental opportunities within the Plan Area.

Nevertheless, even after incorporation of the mitigation measures provided in Section 3.1: Air Quality, overall GHGs generated by the proposed project are expected to be greater than the applicable thresholds of 1,150 MT of CO_2e per year for construction emissions, 1.94 MT CO_2e/service population/year for operational emissions during Year 2035, and 0.80 MT CO_2e/service population/year for operational emissions during Year 2050.

To lessen the significant GHG effect of the proposed project, the WASP would be required to implement the following mitigation measure. This mitigation measure would ensure that the City is demonstrating progress towards meeting post-2020 and post-2030 state GHG emissions reduction goals. The mitigation measure incorporates the recognition that the GHG emissions reduction

landscape will change over time by requiring impacts of individual future development projects within the Plan Area to be assessed and mitigated through the CEQA process consistent with GHG reduction plans in effect at the time the individual projects are proposed. Each individual project would be required to develop a Greenhouse Gas Reduction Plan (GGRP), which would serve as a project-specific plan for the reduction of GHGs associated with individual projects. Individual projects would need to demonstrate consistency with a GHG threshold of significance, such as the per capita emissions thresholds derived under the previous "Thresholds of Significance" subsection, of 1.94 MT CO_2e/service population/year for operational emissions during Year 2035, and 0.80 MT CO_2e/service population/year for operational emissions during Year 2050, as feasible.

While the following mitigation measure would result in reduced GHGs, it is possible that individual projects within the Plan Area may not achieve GHG reductions needed for their individual impacts to be less than significant. Therefore, although the proposed project would be required to implement the following mitigation measure, the WASP would have a ***significant and unavoidable*** impact on the potential to generate greenhouse gas emissions that may have a significant impact on the environment.

MITIGATION MEASURES

Mitigation Measure 3.4-1*: Pursuant to CEQA Guidelines section 15183(5)(b), Plans for the Reduction of Greenhouse Gas Emissions, developers of future individual projects within the Plan Area shall prepare a Greenhouse Gas Reduction Plan (GGRP) aimed at achieving specific performance standards. The individual GGRPs shall include the following:*

1) *The GGRP shall achieve a per capita operational emissions level of 1.94 MT CO_2e/service population/year by year 2035, and 0.80 MT CO_2e/service population/year by year 2050.*
2) *Calculation of GHG emissions projection using an acceptable modeling tool such as the most recent version of CalEEMod.*

GHG reduction measures may include building and site energy reduction measures, measures to reduce project-generated vehicle miles traveled, or other measures. Off-site measures such as participation in a community-wide GHG reduction program(s), if any are adopted, or payment of GHG reduction fees (carbon offsets) into a qualified existing local program, if one is in place, may be considered after all feasible on-site reduction measures are considered. The effectiveness of the GHG reduction measures included in the GGRP must be verifiable based on evidence presented in the GGRP. Representative GHG reduction measures which may be considered may include, but are not limited to:

- *Measures identified by the California Air Pollution Control Officers' Association in Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures or updates to this document as may occur from time to time.*
- *Measures identified in guidance from the air district, if any, and/or in guidance provided by other regional air districts such as the Bay Area Air Quality Management District, Sacramento Metropolitan Air Quality Management District, San Luis Obispo County Air*

Pollution Control District, or other agencies with adopted GHG reduction guidance that is applicable on the date the project application is deemed complete by the City.

If sufficient feasible GHG reduction measures are unavailable to reduce GHG emissions to below the threshold of significance, the applicant shall include evidence in the GGRP to this effect. The GGRP shall be subject to review and approval of the City of Salinas Community Development Department prior to approval of the project-specific entitlements.

Implementation of this mitigation measure shall not be required if the City has a qualified GHG reduction plan in place on the date a future individual project application is deemed complete, the qualified GHG reduction plan reflects the most recent legislatively-adopted GHG reduction targets (e.g., the 2030 target set by SB 32), includes an inventory of projected GHG emissions from development within the Plan Area, and includes GHG reduction measures applicable to development within the Plan Area whose implementation is required as a condition of approval of such projects.

Impact 3.4-2: Potential to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases (Less than Significant with Mitigation)

To date, neither the City of Salinas, nor any regional agency has prepared a qualified GHG reduction plan that is applicable to the proposed project. In addition, the City's current General Plan does not contain policies adopted for the purpose of reducing GHG emissions, including GHG emissions from development within the WASP. The following provides an analysis of the proposed project's consistency with (1) the current version of the statewide Scoping Plan, (2) Executive Orders B-30-15 and S-03-05, and (3) 2008 Monterey Bay Regional Energy Plan.

Consistency with the CARB's *California's 2017 Climate Change Scoping Plan*: In accordance with AB 32, the CARB developed the first Scoping Plan in 2008 to outline the State's strategy to achieve 1990 level emissions by year 2020. In May 2014, the CARB released and adopted the *First Update to the Climate Change Scoping Plan* to identify the next steps in reaching AB 32 goals and evaluate the progress that has been made between 2000 and 2012. A new version of the Scoping Plan was then published by the CARB in November 2017 (entitled *California's 2017 Climate Change Scoping Plan*). Since adoption of the 2008 Scoping Plan and the subsequent updates in 2014 and 2017, state agencies have adopted programs identified in the plan, and the legislature has passed additional legislation to achieve the GHG reduction targets. Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard, California Appliance Energy Efficiency regulations, California Building Standards (e.g., CALGreen and the 2016 Building and Energy Efficiency Standards), 33 percent Renewables Portfolio Standard (RPS), and changes in the corporate average fuel economy standards (e.g., Pavley I and California Advanced Clean Cars).

The new buildings constructed and operated within the Plan Area would be significantly more energy efficient than the current buildings in the surrounding area, many of which were constructed under previous versions of the Title 24 energy code. Likewise, plumbing fixtures and landscaping installed as part of the project would result in a decrease in per capita water use compared to existing land uses throughout the City and the region. The project would also need to operate in accordance with the goals of AB 341 that requires a 75 percent diversion rate of waste from landfills.

Once built, the Plan Area would become part of existing development within the state that can be subjected to a variety of future state or federal GHG reduction measures intended to target existing development to the extent they are legally applicable, such as a more stringent RPS. Additionally, the Plan Area's operational emissions would be reduced as additional regulations are implemented by the CARB and other state agencies to comply with the statewide GHG reduction targets. For example, the project's transportation emissions would be expected to decline as vehicle efficiency standards are implemented beyond the Advanced Clean Cars program and the Low Carbon Fuel Standard is strengthened. Therefore, proposed project emissions would continue to decline beyond the buildout year due to regulations that would indirectly affect project emissions.

In the *First Update to the Climate Change Scoping Plan*, the CARB notes that California is on track to meet the near-term 2020 GHG limit and is well positioned to maintain and continue reductions beyond 2020 (CARB, 2014b). The update also elaborated on potential GHG reduction goals beyond 2020:

> *This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts [MW] of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions (CARB, 2014b).*

Similarly, the CARB's *California's 2017 Climate Change Scoping Plan* (the latest version of the Scoping Plan) provides policies that are considered needed to meet the state's mid-term and long-term GHG emissions reduction targets. For example, *California's 2017 Climate Change Scoping Plan* describes that, although "zero net carbon buildings" are not feasible at this time, they will be necessary to achieve the 2050 target. The CARB's *California's 2017 Climate Change Scoping Plan* also provides the "Scoping Plan Scenario", which describes policies intended to meet the Governor's climate pillars, and the state's mid-term and long-term GHG emissions reduction targets.

Therefore, recognizing the CARB as an authoritative substantial evidence source in evaluating post-2020 GHG impacts, this analysis also evaluates whether buildout of the WASP would interfere with the main programs the CARB has identified to support is conclusions that the state is on a trajectory to meet the 2030 and 2050 GHG targets – (1) initiative to install 12,000 MW of renewable distributed energy by 2020; (2) the California Building Standards Commission's goal to construct net-zero energy homes after 2020; (3) existing building retrofits under AB 758; (4) the reduction in GHG emissions in the electricity sector through the implementation of the 50 percent RPS under SB 350; (5) the ongoing implementation of the Low Carbon Fuel Standard (LCFS); (6) the reduction in GHGs and other pollutants from the transportation sector through the Mobile Source Strategy; (7) the approval and implementation of the Short-Lived Climate Pollutant strategy under SB 1384; (8) implementation of the California Sustainable Freight Action Plan; and (9) implementation of the Post-2020 Cap-and-Trade Program.

- **(1) Initiative to Install 12,000 MW of renewable distributed energy by 2020.** Buildout of the WASP is not expected to interfere with the state's goal to install 12,000 MW of renewable distributed generation systems by 2020. As of November 1, 2017, almost 10,520 MW of distributed generation capacity was operating or installed in California, with an additional 440 MW pending (CEC, 2017). The data include about 5,900 MW of behind-the-meter solar, which far exceeds the state's California Solar Initiative (CSI) goal of 3,000 MW on residential and commercial sites by the end of 2016. In addition, California's existing programs aimed at supporting renewable distributed generation could add another 1,600 MW, if full subscribed (CEC, 2017).

- **(2) California Building Standards Commission's goal to construct net-zero energy homes after 2020**. Likewise, the WASP is not anticipated to interfere with the ability of the California Building Standards Commission's goal of constructing net-zero energy homes after 2020. The WASP is expected to be achieve full buildout by approximately 2035 and would be constructed to comply with existing building energy standards at the time building permits are obtained. Therefore, the project would not interfere with the state's ability to mandate net-zero energy homes for new construction after 2020.

- **(3) Existing building retrofits under AB 758.** Moreover, buildout of the WASP would not interfere with the state's implementation of building retrofits to further energy efficiency for existing buildings under AB 758. AB 758, the Comprehensive Energy Efficiency in Existing Buildings Law, tasked CEC with developing and implementing a comprehensive program to increase energy efficiency in existing residential and nonresidential buildings that "fall significantly below the current standards in Title 24." (Pub. Resources Code, section 25943(a)(1).) Approximately 50 percent of existing residential and nonresidential buildings in California were constructed before California Building Energy Efficiency Standards went into effect in 1978. Other buildings constructed after 1978 also fall below current Title 24 standards and represent significant opportunities for energy efficiency improvements. Pursuant to AB 758, the CEC has developed an Existing Buildings Energy Efficiency Action Plan that identifies strategies to implement energy efficient renovations for such existing commercial, residential, and publicly owned buildings. Strategies include making information about a building's energy efficiency more readily available, educating the public about the cost-benefit of energy efficiency upgrades, making attractive financing more readily available, educating the public and contractors about available energy upgrades and code compliance requirements, and educating a work force capable of implementing energy upgrades. The project would be constructed in compliance with the applicable Title 24 standards and, therefore, would not interfere with CEC or other initiatives implemented to increase energy efficiency and reduce GHG emissions associated with buildings that do not adhere to Title 24 standards.

- **(4) 50 Percent RPS under SB 350**. Under SB 350, the state committed to reducing GHG remissions in the electricity sector through the implementation of the 50 percent RPS by 2030. The California Public Utilities Commission (CPUC) implements and administers RPS compliance, by regulating California's retail sellers of electricity, which include PG&E. The

WASP would not interfere with the RPS, since it would not affect any retail seller of electricity. In addition, the state is well on its way to meeting the 50 percent RPS requirement by 2030, according to data available from the CPUC (CPUC, 2018).

- **(5) Low Carbon Fuel Standard**. The Low Carbon Fuel Standard is designed to encourage the use of cleaner low-carbon fuels in California, encourage the production of those fuels, and therefore, reduce greenhouse gas emissions. The WASP would not interfere with this state-level program.

- **(6) Mobile Source Strategy**. The CARB developed an updated Mobile Source Strategy in May, 2016. The actions contained in the Mobile Source Strategy are designed to deliver broad environmental and health benefits, as well as support much needed efforts to modernize and upgrade transportation infrastructure, enhance system-wide efficiency and mobility options, and promote clean economic growth in the mobile sector. The WASP would not interfere with this state-level program.

- **(7) Short-Lived Climate Pollutant strategy under SB 1383**. SB 1383 is a state program that provides a strategy to reduce short-lived climate pollutants. The goals of the program are to reduce methane and hydrofluorocarbon (HFC) emissions below 2013 levels by 2030, and a 50 percent reduction in anthropogenic black carbon emissions below 2013 levels by 2030. The WASP would not interfere with this state-level program.

- **(8) California Sustainable Freight Action Plan**. This program is designed to improve freight system efficiency within the state by 25 percent by 2030. The WASP would not interfere with this state-level program.

- **(9) Post-2020 Cap-and-Trade Program**. The CARB's Scoping Plan also recommended the development of a California Cap-and-Trade Program that links with other Western Climate Initiative partner programs to create a regional market system. On January 1, 2013, the CARB launched the second-largest GHG Cap-and-Trade Program in the world. The Cap-and-Trade Program establishes a hard and declining cap on approximately 85 percent of total statewide GHG emissions. Under the Cap-and-Trade Program, the CARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. As the emissions cap is gradually reduced over time, and as additional sources are brought under the cap to include the vast majority of emissions in the state, the program will ensure that California remains on track to continually reduce emissions and meet the 2020 limit. Looking out into the future, the Cap-and-Trade Program will likely play a critical role in keeping California on the right emissions reduction trajectory to meet ongoing reduction targets at the lowest possible cost. The Cap-and-Trade Program is a vital component in achieving both California's near-and long-term GHG emissions targets (CARB, 2014b). While the Cap-and-Trade Regulation is not directly applicable to the WASP, it is worth noting that it represents an important component of the overall GHG reduction framework in the state. If the CARB determines that sufficient reductions are not being achieved in the "uncapped sectors," the Cap-and-Trade Program can be adjusted to ensure that the state's overall GHG reduction targets are met.

Consistency with Executive Order B-30-15 and S-03-05: As described in the Regulatory Setting above, Governor Brown issued Executive Order B-30-15 in April 2015. It establishes a year 2030 GHG Reduction target of 40 percent below 1990 levels by 2030. The 2030 target is much more aggressive than the 2020 target and will necessitate development of new, more aggressive GHG reduction requirements at the state and local levels. Separately, Executive Order S-03-05, issued in 2005, included a goal to reduce California's GHG emissions 80% below the 1990 levels by the year 2050.

As described under Impact 3.4-1, the WASP would generate greenhouse gas emissions that could conflict with the these long-term GHG Reduction targets, even with implementation of mitigation measures 3.1-1 through 3.1-9 contained within Section 3.1: Air Quality. However, implementation of Mitigation Measure 3.4-1 would ensure that GHG reduction measures required pursuant to it are consistent with the intent of current and future statewide GHG reduction legislation and regulations, and with current and future expectations of local, regional, and state stakeholders regarding the City's effort to reduce GHG emissions from new development, including Executive Order B-30-15 and S-03-05. Therefore, with implementation of Mitigation Measure 3.4-1, new development of the Plan Area would consistent with Executive Orders B-30-15 and S-03-05.

Consistency with the 2008 Monterey Bay Regional Energy Plan: The *2008 Monterey Bay Regional Energy Plan* includes energy efficiency and renewable energy objectives for the AMBAG region. As part of achieving the objectives set out in this plan, AMBAG has (1) developed the AMBAG Energy Watch Program (a regional government partnership program with PG&E), (2) developed a "Green Business Directory" that provides a list of locally available products, and (3) has promoted the establishment of local ordinances for enhanced building energy standards for jurisdictions within the Monterey Bay region. The WASP would not interfere with any of these objectives.

Conclusion: The WASP would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, as described above. With implementation of the mitigation measures provided within Section 3.1: Air Quality and with implementation of Mitigation Measure 3.4-1, there would be a ***less than significant*** impact.

Impact 3.4-3: Project implementation may result in the inefficient, wasteful, or unnecessary use of energy resources (Less than Significant)

Appendix F of the state CEQA Guidelines requires consideration of the potentially significant energy implications of a project. CEQA requires mitigation measures to reduce "wasteful, inefficient and unnecessary" energy usage (Public Resources Code Section 21100, subdivision [b][3]). According to Appendix F of the CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, the proposed project would be considered "wasteful, inefficient, and unnecessary" if it were to violate state and federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation.

The proposed project is a large-scale Specific Plan, and incorporates residential, commercial, public/institutional, and open space uses. The amount of energy used by the proposed project during operation would directly correlate with the number, size, and type of project buildings, the energy efficiency of associated building equipment and appliances, and outdoor lighting, and energy use associated with other on-site buildings and activities. Other project energy uses include fuel used by vehicle trips generated during project construction and operation, fuel used by off-road construction vehicles during construction activities, and fuel used by project maintenance activities during project operation. The following discussion provides a detailed calculation of energy usage expected for the proposed project, for the unmitigated and mitigated scenarios, as provided by applicable modelling software (i.e. CalEEMod v2016.3.2 and the California Air Resource Board's EMFAC2014). Additional assumptions and calculations are provided within Appendix B.

Electricity and Natural Gas: Electricity and natural gas used by the proposed project would be used primarily to generate energy for on-site buildings, lighting, and water pumping, treatment, and conveyance. As shown in the following tables, "Energy" is one of the categories that was modeled for GHG emissions. The total unmitigated and mitigated GHG emissions generated from the "Energy" category is 9,231.7 MT CO_2e. The following discussion includes a more detailed breakdown of energy consumption in terms of natural gas and electricity consumption. The proposed project would consider effective ways to encourage alternative energy use throughout the WASP area, as described by mitigation measure provided in *Section 3.1: Air Quality* of this EIR.

Natural Gas: Unmitigated natural gas energy consumption by land use for buildout Year 2035 is presented in Table 3.4-6. This table also includes the GHG emissions that are generated by the natural gas use. These results are also applicable as estimates for the Year 2050 (as provided by CalEEMod) (see Appendix B for further detail).

TABLE 3.4-6: NATURAL GAS USE AND GHG EMISSIONS BY LAND USE IN 2035 (UNMITIGATED & MITIGATED)

	Natural Gas Use	***Total CO_2***	***CH_4***	***N_2O***	***CO_2e***
Land Use	kBTU/year	MT/year			
Apartments Mid Rise	786,190	41.9	<0.1	<0.1	42.2
City Park	0	0	0	0	0
Condo/Townhouse	54,072,100	2,885.5	0.1	0.1	2,902.6
Elementary School	24,884,600	1,327.9	<0.1	<0.1	1,355.8
General Office Building	2,340,910	124.9	<0.1	<0.1	125.7
High School	31,479,300	1,679.9	<0.1	<0.1	1,689.8
Junior High School	16,691,500	890.7	<0.1	<0.1	896.0
Regional Shopping Center	879,270	46.9	<0.1	<0.1	47.2
Single Family Housing	39,557,600	2,110.9	<0.1	<0.1	2,123.5
Supermarket	1,281,360	68.4	<0.1	<0.1	68.8
Total	**171,186,640**	**9,177.1**	**0.2**	**0.2**	**9,231.7**

SOURCES: CALEEMOD (V.2016.3.2)

Electricity: Unmitigated electricity energy consumption by land use for buildout Year 2035 is presented in Table 3.4-7. This table also includes the GHG emissions that are generated by the electricity use. These results are also applicable for the Year 2050 (as provided by CalEEMod) (see Appendix B for further detail).

TABLE 3.4-7: ELECTRICITY USE AND GHG EMISSIONS BY LAND USE IN 2035 (UNMITIGATED & MITIGATED)

	Electricity Gas Use	***Total CO_2***	***CH_4***	***N_2O***	***CO_2e***
Land Use	kWh/year	MT/year			
Apartments Mid Rise	375,680	37.1	<0.1	<0.1	37.5
City Park	0	0	0	0	0
Condo/Townhouse	14,571,200	1,437.5	0.2	<0.1	1,454.2
Elementary School	7,273,750	717.6	0.1	<0.1	7259
General Office Building	2,549,690	251.5	<0.1	<0.1	254.4
High School	92,013,800	907.8	0.1	<0.1	918.3
Junior High School	4,878,920	481.3	0.1	<0.1	486.9
Regional Shopping Center	3,965,990	391.3	0.1	<0.1	395.8
Single Family Housing	11,011,300	1,086.3	0.1	<0.1	1,098.9
Supermarket	2,338,710	230.7	<0.1	<0.1	233.4
Total	**138,979,040**	**5,541.2**	**0.7**	**0.2**	**5,605.2**

SOURCES: CALEEMOD (V.2016.3.2)

These tables are representative of energy usage for both Years 2035 and 2050. According to CalEEMod's *Appendix A: Calculation Details for CalEEMod*, CalEEMod uses the California Commercial End Use Survey (CEUS) database to develop energy intensity value for non-residential buildings. The energy use from residential land uses is calculated based on the Residential Appliance Saturation Survey (RASS). Similar to CEUS, this is a comprehensive energy use assessment that includes the end use for various climate zones in California.

It should be noted that the estimated electricity usage for water (pumping, treatment, and conveyance) generated by CalEEMod is a conservative estimate. Overall, water usage estimated by CalEEMod is assumed to be larger than would be used by the proposed project. In fact, the water demand for proposed project uses would represent a substantial net reduction in water usage, as compared water used for existing on-site agricultural uses (Cal Water, 2016). However, the proposed project incorporates three new on-site groundwater wells, which would be connected to the Salinas District of Cal Water, providing additional water supply to the City. Projected water pumped by the proposed project's three new wells would total approximately 2,238 acre-feet/year (AFY) at project buildout, whereas CalEEMod estimated overall project water consumption at 3,169 AFY for the proposed project. More specifically, total average design capacity of the three new wells at project buildout would be 5,812 AFY, but projected overall well pumping at proposed project buildout would be 38.5% of design capacity (Cal Water, 2016). Therefore, although the proposed project was designed to be able to provide an average of 5,812 AFY, it would only be expected to pump

approximately (5,812 AFY x 38.5%) 2,238 AFY (Cal Water, 2016). Therefore, overall proposed project water consumption at 3,169 AFY upon project buildout represents a conservative estimate.

Electricity intensity factors used by CalEEMod were provided by CEC's *2006 Refining Estimates of Water-Related Energy Use in California* using the average values for Northern California. These values incorporate a factor for conveying water over relatively large distances, which is energy intensive. Although the proposed project's groundwater pumping is also an electricity-intensive activity, this groundwater is expected to be conveyed and used locally (within the Salinas District boundary). Therefore, it was assumed that the CEC's 2006 average electricity intensity factors represent an effective proxy for the electricity intensity of the water generated by the proposed project's three on-site wells, despite being derived from different factors and assumptions.

On-road Vehicles (Operation): The proposed project would generate vehicle trips during its operational phase. A description of project operational on-road mobile energy usage is provided below.

According to the Traffic Study prepared for the proposed project (Fehr & Peers, 2018), and as described in more detail in Section 3.10 of this EIR, the project would generate approximately 52,094 net new total daily trips at full buildout, under the unmitigated scenario. In order to calculate operational on-road vehicle energy usage and emissions, De Novo Planning Group used default trip lengths generated by CalEEMod, which are based on the project location and urbanization level parameters that were selected within the model (i.e. "Monterey County" and "Urban", respectively). These values are provided by the individual districts or use a default average for the state, depending on the location of the proposed project (ENVIRON, 2013). CalEEMod also generated an assumed (default) breakdown of trip types: residential trip types were derived from the 1999 Caltrans Statewide Travel Survey, and commercial trip types were provided from the Institute of Transportation Engineers (ITE) and an analysis of information provided for the South Coast Air Basin (SCAB) (ENVIRON, 2013). Based on trips lengths provided by these sources and the trip generation as provided by Fehr & Peers, the proposed project is estimated to generate a total of approximately 221,017 average daily vehicle miles travelled (Average Daily VMT) at project buildout. Using fleet mix data provide by CalEEMod (v2016.3.2), Year 2035 gasoline and diesel MPG (miles per gallon) factors for individual vehicle classes as provided by EMFAC2014, weighted average MPG factors for gasoline and diesel were derived. Therefore, upon full buildout, the proposed project would generate operational vehicle trips that would use a total of approximately 6,190 gallons of gasoline and 802 gallons of diesel per day, or 2,259,455 gallons of gasoline and 292,769 gallons of diesel per year.

On-road Vehicles (Construction): The proposed project would also generate on-road vehicle trips during project construction (from construction workers and vendors travelling to and from the Plan Area). De Novo Planning Group estimated the vehicle fuel consumed during these trips based the assumed construction schedule, vehicle trip lengths and number of workers per construction phase as provided by CalEEMod, and Year 2018 gasoline and diesel MPG factors provided by EMFAC2014 (Year 2018 factors were used for the entire construction schedule, representing a conservative approach). For the sake of simplicity, it was assumed that all construction worker light duty passenger cars and truck trips use gasoline as a fuel source, and all medium and heavy-duty vendor

trucks use diesel fuel). Table 3.4-8, below, describes gasoline and diesel fuel consumed during each construction phase (in aggregate). As shown, the vast majority of on-road mobile vehicle fuel used during the construction of the proposed project would occur during the building construction phase. There is no feasible mitigation available that would reduce on-road mobile vehicle GHG emissions generated by the project construction activities (requiring the use of electric construction vehicles was deemed infeasible, given price and availability concerns). See Appendix B for a detailed accounting of construction on-road vehicle fuel usage estimates.

TABLE 3.4-8: ON-ROAD MOBILE FUEL GENERATED BY PROJECT CONSTRUCTION ACTIVITIES – BY PHASE

Construction Phase	*# of Days*	*Total Daily Worker Trips[(a)]*	*Total Daily Vendor Trips[(a)]*	*Total Gallons of Gasoline Fuel[(b)]*	*Total Gallons of Diesel Fuel[(b)]*
Site Preparation	64	18	0	**567**	**0**
Grading	65	20	0	**640**	**0**
Underground Utilities	45	0	0	**0**	**0**
Paving	87	15	0	**642**	**0**
Building Construction	4,152	5,396	1,564	**11,024,722**	**7,323,026**
Architectural Coating	3,917	1,079	0	**2,079,761**	**0**
Total		**6,528**	**1,564**	**13,106,332**	**7,323,026**

NOTE: [(A)] PROVIDED BY CALEEMOD. [(B)]SEE APPENDIX B FOR FURTHER DETAIL

SOURCE: CALEEMOD (V.2016.3.2); EMFAC2014.

Off-road Vehicles (Construction): Off-road construction vehicles would use diesel fuel during the construction phase of the proposed project. A non-exhaustive list of off-road constructive vehicles expected to be used during the construction phase of the proposed project includes: forklifts, generator sets, tractors, excavators, and dozers. Based on the total amount of CO_2 emissions expected to be generated by the proposed project (as provided by the CalEEMod output), and standard conversion factors (as provided by the U.S. Energy Information Administration), the proposed project would use a total of approximately 28,830 gallons of diesel fuel for off-road construction vehicles. Detailed calculations are provided in Appendix B.

Other: Proposed project landscape maintenance activities would generally require the use fossil fuel (i.e. gasoline) energy. For example, lawn mowers require the use of fuel for power. As an approximation, it is estimated that landscape care maintenance for project residences would require approximately fifty individuals eight hours day per week, or 20,800 hours per year. Assuming an average of approximately 0.5 gallons of gasoline used per person-hour, the proposed project would require the use of approximately 10,400 gallons of gasoline per year to power landscape maintenance equipment. The energy used to power landscape maintenance equipment would not differ substantially from the energy required for landscape maintenance for similar projects.

The proposed project could also use other sources of energy not identified here. Examples of other energy sources include alternative and/or renewable energy (such as solar PV) and/or on-site

stationary sources (such as on-site diesel generators) for electricity generation. However, these sources of energy are not planned at this time.

LEED Measures Incorporated into the Proposed Project: Although Leadership in Energy and Environmental Design (LEED) certification is not mandatory for the proposed project, the applicant has selected practicable and economically feasible measures from the Green Building Rating System For New Construction & Major Renovations, Version 2009, that will be incorporated into the proposed project. A full listing of the LEED measures, and the LEED rating points for each LEED measure, are listed below in Table 3.4-9. The proposed project would incorporate these LEED measures either as components of the WASP or based on the mitigation measures contained within this DEIR.

TABLE 3.4-9: WASP LEED MEASURES

Category	*Checklist*	*Description*	*Points*
Sustainable Sites	SS Prerequisite 1: Construction Activity Pollution Prevention	Control soil erosion, waterway sedimentation and airborne dust generation.	0
Sustainable Sites	SS Credit 4.4: Parking Capacity and Car Sharing	Size of parking lot to meet but not exceed local zoning.	3
Materials and Resources	MR Prerequisite 1: Storage and Collection of Recyclables Required	Provide easily-accessible dedicated area for the collection and storage of materials for recycling.	0
Indoor Environmental Quality	IEQ Prerequisite 2: Environmental Tobacco Smoke Control	Prohibit smoking in building and on property.	0
Indoor Environmental Quality	IEQ Credit 4.2: Low-Emitting Materials – Paints and Coatings	Paints and coatings used on the interior of the building must comply with low-VOC requirements.	1

SOURCE: LEED 2009 FOR NEW CONSTRUCTION AND MAJOR RENOVATIONS

Conclusion: The proposed project would use energy resources for the operation of project buildings (electricity and natural gas), for on-road vehicle trips (e.g. gasoline and diesel fuel) generated by the proposed project, and from off-road construction activities associated with the proposed project (e.g. diesel fuel). Each of these activities would require the use of energy resources. The proposed project would be responsible for conserving energy, to the extent feasible, and relies heavily on reducing per capita energy consumption to achieve this goal, including through statewide and local measures.

The proposed project would be in compliance with all applicable federal, state, and local regulations regulating energy usage. For example, PG&E, the electric and natural gas provider to the proposed project, is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the statewide RPS to increase the proportion of renewable energy (e.g. solar and wind) within its energy portfolio. PG&E is expected to achieve at least a 33% mix of renewable energy resources by 2020, and 50% by 2030. Additionally, energy-saving regulations, including the latest State Title 24 building energy efficiency standards ("part 6"), would be applicable to the proposed project. These regulations would require the proposed project buildings to achieve a high level of energy efficiency. For example, part 6 of the latest Title 24

building energy efficiency standards would require improvements for attics, walls, water heating, and lighting, as compared with the previous version of these standards. Other statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g. the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time.

Furthermore, as described previously, the implementation of Mitigation Measures 3.1-1 through 3.1-14 (as provided by Section 3.1 Air Quality) would reduce project energy usage (including from electricity, natural gas, and on-road vehicle gasoline and diesel sources). Overall, with the incorporation of mitigation measures would ensure that the proposed project would avoid and reduce inefficient, wasteful, and unnecessary consumption of energy. The proposed project would comply with all existing energy standards, including those established by the City of Salinas, the local air district (MBARD), and the State of California, and would not be expected to result in significant adverse impacts on energy resources. For these reasons, the proposed project would not cause an inefficient, wasteful, or unnecessary use of energy resources nor cause a significant impact on any of the threshold as described by Appendix F of the *CEQA Guidelines*. This is a ***less than significant*** impact.

Impact 3.4-4: Cumulative impact on climate change from increased project-related greenhouse gas emissions (Cumulatively Considerable and Significant and Unavoidable)

Greenhouse gas emissions from a single project will not cause global climate change; however, greenhouse gas emission from multiple projects throughout a region or state could result in a cumulative impact with respect to global climate change.

In California, there has been extensive legislation passed with the goal of reducing greenhouse gas emissions. The legislative goals are as follows: 1) 2000 levels by 2010, 2) 1990 levels by 2020, 3) 40% below 1990 levels by 2030, and 4) 80% below the 1990 levels by the year 2050. To achieve these goals the California Air Resources Board has developed regional greenhouse gas emission reduction targets for the automobile and light truck sectors (the largest single source of greenhouse gas emissions) for 2020 and 2035. The regional greenhouse gas emission reduction targets for each region in California were established the California Air Resources Board.

As described in Impact 3.4-2, implementation of the proposed project will still generate GHG emissions that wouldn't otherwise exist without the proposed project. Given the length of construction activities for a project of this size, the construction emissions would be a long-term release of approximately 168,734.3 MT CO_2e. The operational emissions would be a long-term release totaling approximately 51,939.2 MT CO2e per year without mitigation, and 47,684.9MT CO_2e per year with mitigation. The City of Salinas must weigh the economic and social benefits of development against the environment impacts associated with development. The City of Salinas's planning efforts included targeted growth that accommodates the economic and social needs of the community, while recognizing and seeking to mitigate environmental impacts when growth occurs. The use of New Urbanism principals, which emphasize compact, walkable communities, and which

were incorporated into the design of the proposed project, would help minimize GHG emissions generated by the proposed project. Further, the proposed project would be required to implement mitigation measures, which is intended to reduce emissions to the maximum extent feasible. The State of California continues to implement measures that are intended to reduce emissions on a State-wide scale (i.e. vehicle fuel efficiency standards in fleets, low carbon fuels, etc.) that are consistent with AB 32. These types of state-wide measures will benefit the proposed project (and city as a whole) in the long-term as they come into effect; however, the City does not have the jurisdiction to create far-reaching (i.e. state-wide) measures to reduce GHG emissions. On a project-by-project case, the City of Salinas evaluates a project and the potential to impose project-specific mitigation, which has been done through this GHG analysis. However, because the project is expected to result in a net increase in CO_2e emissions even with mitigation measures incorporated into the project, implementation of the WASP would have a ***cumulatively considerable contribution*** and ***significant and unavoidable*** impact to greenhouse gases.

The purpose of this section is to disclose and analyze the potential impacts associated with hazards and hazardous materials related to the Specific Plan Area and general vicinity, and to analyze the potential for exposure of people to hazards and hazardous materials, as the West Area Specific Plan is built and operated in the future. This section is based in part on the following technical studies: Phase I Western Area Specific Plan of the Boronda Road Future Growth Area (BRFGA) (Geocon, 2016), and Limited Phase II Environmental Site Assessment and Geohazards Study Western Area Specific Plan of the Boronda Road Future Growth Area (BRFGA) (Geocon, 2016).

One comment was received during the NOP review period regarding hazards and/or hazardous materials. The comment was related to potential hazards near school sites.

3.5.1 ENVIRONMENTAL SETTING

PHYSICAL SETTING

The Specific Plan Area is currently agricultural land used extensively for the cultivation of lettuce, cauliflower, broccoli, and strawberries. McKinnon Elementary School, which is surrounded by agricultural fields, is located in the southwestern portion of the Specific Plan Area. There are several small clusters of buildings located on the northern, western, and eastern edges of the Specific Plan Area. The clusters of buildings include residences, barns, warehouses, and storage yards. These structures have supported the agricultural operations and some have been used or are currently being used to temporarily store fertilizers, pesticides, herbicides and other materials normally associated with ongoing agricultural cultivation. Due to the long-term use of the land for agricultural purposes, the Specific Plan Area has the potential for certain environmental conditions related pesticide and herbicide use that could have caused hazardous residual products to accumulate in the soil.

The approximately 795-acre Specific Plan Area is surrounded by suburban uses including residential uses, as well as other agricultural land uses. The Specific Plan Area consists of 12 parcels that are predominantly agricultural lands with some existing development including: a few farm residences and associated agricultural buildings (i.e. barns, warehouses, and storage yards) along the northern, western, and eastern sides of the Specific Plan Area and McKinnon Elementary School in the southwestern portion of the Specific Plan Area. A new high school is proposed for the northern portion of the Specific Plan Area.

Residential development is located to the northwest, west, and south of the Specific Plan Area. The residential development consists of single family homes, condominiums, and apartments. La Joya elementary school and Bolsa Knolls middle school are located within the residential area adjacent to the northwest of the Specific Plan Area. Santa Rita Elementary School is located within the residential area adjacent to the west of the Specific Plan Area.

Plan Area Topography

The elevation of the Specific Plan Area is approximately 134 feet above mean sea level. The overall topography of the Specific Plan Area is nearly flat, with little change in elevation. The overall slope

across the Specific Plan Area is from northeast to southwest at approximately 0.3%. There are no natural streams or water bodies on or immediately adjacent to the Specific Plan Area.

Geologic Conditions

Specific Plan Area geologic information was obtained from the *Geologic Map of the Monterey Quadrangle* (California Geological Survey [CGS], 2002). The Specific Plan Area is located in the southern Salinas Valley in the Coast Ranges geomorphic province. The Salinas Valley is bounded by the Gabilan Range to the east, the Sierra de Salinas Mountains to the south and west, and by Monterey Bay to the northwest. The northern Salinas Valley is filled with a thick sequence of Pleistocene to recent age sedimentary deposits both continental and marine in origin. The referenced geologic map indicates that the Specific Plan Area is underlain by Quaternary alluvial fan deposits (CGS, 2002).

Soil Conditions

Information concerning soil conditions in proximity to the Specific Plan Area was obtain from review of the United States Department of Agriculture's (USDA) Web Soil Survey (http://websoilsurvey.nrcs. usda.gov/app/HomePage.htm). Information available on Web Soil Survey indicates that surficial onsite soil is predominantly classified as Chualar loam, which is a moderately well-drained soil that formed on alluvial fans from fine-loamy alluvium derived from igneous and metamorphic rock.

HAZARDS ASSESSMENT

For the purposes of this EIR, "hazardous material" is defined as provided in California Health & Safety Code, Section 25501:

- Any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment.

"Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

"Hazardous waste" is a subset of hazardous materials. For the purposes of this EIR, the definition of hazardous waste is essentially the same as that in the California Health & Safety Code, Section 25517, and in the California Code of Regulations (CCR), Title 22, Section 66261.2:

- Hazardous wastes are wastes that, because of their quantity, concentration, physical, chemical, or infectious characteristics, may either cause, or significantly contribute to, an increase in mortality or an increase in serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

CCR Title 22 categorizes hazardous waste into hazard classes according to specific characteristics of ignitibility, corrosivity, reactivity, or toxicity. Hazardous waste with any of these characteristics is also known as a Resource Conservation and Recovery Act (RCRA) waste.

Hazardous materials can be categorized as hazardous non-radioactive chemical materials, radioactive materials, toxic materials, and biohazardous materials. The previous definitions are adequate for non-radioactive hazardous chemicals. Radioactive and biohazardous materials are further defined as follows:

- Radioactive materials contain atoms with unstable nuclei that spontaneously emit ionizing radiation to increase their stability.
- Radioactive wastes are radioactive materials that are discarded (including wastes in storage) or abandoned.
- Toxic wastes are harmful or fatal when ingested or absorbed (e.g., containing mercury, lead). When toxic wastes are land disposed, contaminated liquid may leach from the waste and pollute groundwater.
- Biohazardous materials include materials containing certain infectious agents (microorganisms, bacteria, molds, parasites, and viruses) that cause or significantly contribute to increased human mortality or organisms capable of being communicated by invading and multiplying in body tissues.
- Medical wastes include both biohazardous wastes (byproducts of biohazardous materials) and sharps (devices capable of cutting or piercing, such as hypodermic needles, razor blades, and broken glass) resulting from the diagnosis, treatment, or immunization of human beings, or research pertaining to these activities.

There are countless categories of hazardous materials and hazardous wastes that could be found on any given property based on past uses. Some common examples include agrichemicals (chlorinated herbicides, organophosphate pesticides, and organochlorine pesticides, such as such as Mecoprop (MCPP), Dinoseb, chlordane, dichloro-diphenyltrichloroethane (DDT), and dichloro-diphenyl-dichloroethylene (DDE)), petroleum based products (oil, gasoline, diesel fuel), a variety of more common household chemicals including paints, cleaners, and solvents, and asbestos-containing or lead-containing materials (e.g., paint, sealants, pipe solder).

As previously noted, the Specific Plan Area was assessed for environmental hazards in the Phase 1, Environmental Site Assessment (ESA). The objective of the Phase 1 ESA was to provide an evaluation of current and historical use of the Specific Plan Area to assess whether such use has, or is expected to, result in environmental degradation of the Specific Plan Area.

Records Review

This section summarizes an Environmental Data Resources (EDR) review of readily available agency records for the Specific Plan Area and properties and facilities in the surrounding vicinity. The EDR review included a search of Federal, State, and local databases. Table 3.5-1 includes a summary of this search.

TABLE 3.5-1: ENVIRONMENTAL DATA RESOURCES

DATABASE NAME	SEARCH RADIUS (MILES)	NUMBER OF LISTINGS
FEDERAL DATABASES		
RCRA-LQG (Resource Conservation and Recovery Act [RCRA] – Large Quantity Generators [LQG])	0.375	1
RCRA-SQG (Small Quantity Generators [SQG])	0.375	1
STATE, LOCAL, AND TRIBAL DATABASES		
ENVIROSTOR (DTSC Electronic Database)	1.125	9
LUST (Leaking Underground Storage Tank)	0.625	4
SLIC (Spills, Leaks, Investigation, and Cleanup)	0.625	1
UST (Underground Storage Tank)	0.375	3
AST (Aboveground Storage Tank)	0.375	3
CA FID UST (Facility Inventory Database [FID])	0.375	3
ADDITIONAL ENVIRONMENTAL RECORDS		
SWRCY (Recycler Database)	0.625	1
SCH (School Property Evaluation Program)	0.375	5
Historical (HIST) UST	0.375	4
SWEEPS UST	0.375	4
FINDS	0.125	2
HIST CORTESE	0.5	1
Certified Uniformed Program Agency (CUPA)	0.375	17
HAZNET	0.125	4
EDR US Historical Auto Stations	0.375	5
EDR US Historical Cleaners	0.375	7
* Indicates that the Plan Area is listed in the database.		

SOURCE: GEOCON, 2016 PHASE I WESTERN AREA SPECIFIC PLAN OF THE BORONDA ROAD FUTURE GROWTH AREA (BRFGA)

Four facilities within the Specific Plan Area were listed in various databases and are summarized below:

Proposed Elementary School, "Mortensen Property"– According to the ENVIROSTOR and SCH databases, multiple investigations have been conducted on site parcel 211-011-008. A Preliminary Environmental Assessment (PEA) report was prepared for this site parcel, which is planned to be developed with a Salinas Union High School District (SUHSD) high school, and is available on the Department of Toxic Substances Control (DTSC), EnviroStor website. Soils impacted with total petroleum hydrocarbons as diesel (TPHd) and motor oil (TPHmo), organochlorine pesticides (OCPs), and polycyclic aromatic hydrocarbons (PAHs), related to former agricultural uses, were removed in April 2016. A Removal Action Completion Report was reviewed by DTSC and the report was approved on November 28 2016.

Fontes Farm, 630 East Boronda Road – According to the HIST UST Listings database, this property had two 1,000-gallon underground storage tanks (USTs) that stored contents registered as "regular" and "unleaded." The SWEEPS UST database also lists two 1,000-gallon USTs that purportedly contain leaded and unleaded motor vehicle (M.V.) fuel. The USTs were active as of July 1985. According to the CUPA Listings database, this property is actively billed for hazardous materials onsite, but the

database also has two listings that are inactive. Based on the lack of reported spills or releases, this business appears unlikely to have impacted the Specific Plan Area.

Salinas Berry Farms-Madolora, 261 Natividad Road – According to the CUPA Listings database, this property was billed for hazardous materials stored onsite. Both databases list this facility as inactive. Based on the lack of reported spills or releases, this former business appears unlikely to have impacted the Specific Plan Area.

Triangle Farms, Inc.-Bondesen Ranch, 239 Natividad Road – According to the Aboveground Storage Tank (AST) database, this property had a 9,200-gallon AST; the contents stored in the AST are unknown. According to the CUPA Listings database, this property was billed for hazardous materials stored onsite. Based on the lack of reported spills or releases, this business appears unlikely to have impacted the Specific Plan Area.

OFFSITE PROPERTIES

Table 3.5-2 summarizes information regarding properties less than ⅛-mile from the Specific Plan Area (¼-mile for LUST facilities) that are listed on one or more of the databases searched by EDR, the status of their listings, and their potential, if any, to impact (or to have impacted) the Specific Plan Area.

TABLE 3.5-2: OFFSITE ENVIRONMENTAL RECORDS

BUSINESS	ADDRESS	APPROXIMATE DISTANCE FROM THE PLAN AREA	DATABASE	PERTINENT INFORMATION/POTENTIAL TO IMPACT THE PLAN AREA
McKinnon Elementary School	E. Boronda Road/ McKinnon Street	Located within the Plan Area boundaries but appears as "offsite" in the EDR report	SCH, ENVIROSTOR	According to the ENVIROSTOR database, this property was investigated for past pesticide use. No pesticide contamination was reported at concentrations exceeding applicable screening levels, therefore a "no further action" determination was granted and the school was constructed. This property appears unlikely to have impacted the Plan Area.
Higashi Farms-Alexndr Rch (Rio Mesa Farms)	1151 Rogge Road	1,500 feet to the north (upgradient)	AST, CUPA Listings	According to the AST database, this property had a 1,500-gallon AST (unknown contents). According to the CUPA Listings database, this property was billed for hazardous materials stored onsite. Both databases list this facility as inactive. Based on the lack of reported spills or releases, this former facility appears unlikely to have impacted the Plan Area.

A Oseguera Company, Inc.	1099 Rogge Road	500 feet to the northeast (upgradient)	AST, CUPA Listings	According to the AST database, this property had a 2,500-gallon AST (unknown contents). According to the CUPA Listings database, this property was billed for hazardous materials stored onsite. Based on the lack of reported spills or releases, this former facility appears unlikely to have impacted the Plan Area.
Connie Ruiz	69 Norman Way	50 feet to the northwest (upgradient)	HAZNET	According to the HAZNET database, this property disposed of 0.4 ton of hazardous waste to a landfill. The waste category was not reported. Based on the other database listings for this property (i.e., ENVIROSTOR, Hist Cal-Sites, etc.), this former facility appears unlikely to have impacted the Plan Area.
CVS Pharmacy #1300 (Longs Drugs #479)	662 E. Boronda Road	300 feet southeast (downgradient)	RCRA-LQG, HAZNET, FINDS, CUPA Listings	According to the RCRA-LQG database, this business generates 1,000 kilograms or more of hazardous waste during a calendar month. The waste is likely pharmaceutical and/or related to photograph processing. There are no records reporting spills or releases. Based on its downgradient position relative to the Plan Area, this facility is unlikely to have impacted the Plan Area.
Replanet, LLC	640 East Boronda Road	300 feet southeast (downgradient)	SWRCY, HAZNET	According to the HAZNET and SWRCY databases, this facility stores and transfers glass, plastic, aluminum and other metals offsite for disposal and/or recycling. Based on its downgradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
Gonzales Motorcross Racing	13450 Garfield Circle	50 feet west (cross-gradient)	EDR US Hist Auto Stat	According to the EDR US Hist Auto Stat database, this business was an auto service facility in 2005. This business is not listed on any other databases and, no other pertinent information about this business was provided under this listing. Based on its cross-gradient position relative to the Plan Area, this business

				appears unlikely to have impacted the Plan Area.
Turners Automotive	94 Russell Road	100 feet west (cross-gradient)	EDR US Hist Auto Stat	According to the EDR US Hist Auto Stat database, this was an auto repair facility in 2001.This business is not listed on any other databases and, no other pertinent information about this business was provided under this listing. Based on its cross-gradient position relative to the Plan Area, this business appears unlikely to have impacted the Plan Area.
Deep Steam Carpet & Upholstery Cleaning	94 Penzance Street	400 feet north (upgradient)	EDR US Hist Cleaners	According to the EDR US Hist Cleaners database, this carpet and upholstery cleaning service operated in 2006. Although it is upgradient relative to the Plan Area, the apparent residential development at this address in 2006 suggests that this facility was not a commercial facility and therefore is unlikely to have impacted the Plan Area.
Proposed Elementary School #5 (Harrod Property)	NE of East Boronda/ Natividad Road intersection	150 feet east (cross-gradient)	SCH, ENVIROSTOR	According to the ENVIROSTOR database, this property was investigated for past pesticide use. Pesticide contamination was found, but the health risk evaluation determined that they were not a threat to human health; therefore a "no further action" determination was granted and it was determined suitable for unrestricted land use. This property appears unlikely to have impacted the Plan Area.
Settrini Ranch	250 Natividad Road	100 feet east (cross-gradient)	HIST UST, CUPA Listings, CA FID UST, SWEEPS UST	According to the HIST UST, SWEEPS UST, CA FID UST, and CUPA Listing databases, a 1,000-gallon UST is present on this facility that reportedly contained regular gasoline. According to the CUPA Listing database, this facility is actively billed for hazardous materials stored onsite. As a spill or release from this UST has not been reported, this former facility appears unlikely to have impacted the Plan Area.

Ocean Steam Cleaning	18857 Lenny Street	400 feet east (cross-gradient)	EDR US Hist Cleaners	According to the EDR US Hist Cleaners database, this cleaning service operated in 2010. Based on the apparent residential development at this address in 2010, and its cross-gradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
The Cleaning Co.	15 Yale Circle	200 feet south (downgradient)	EDR US Hist Cleaners	According to the EDR US Hist Cleaners database, this cleaning service operated in 2008. Based on the apparent residential development at this address in 2008, and its downgradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
7-Eleven #32264 (Southland Store 32264)	1992 Natividad Road	50 feet south (downgradient)	UST, CUPA Listings	According to the UST and CUPA Listings databases, this facility is actively billed for hazardous materials onsite. There are no available records of past spills or releases, and due to its downgradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
Firestone Store #36F7	150 Northridge Mall	1,500 feet southwest (downgradient)	Hist UST, CUPA Listings	According to the Hist UST and CUPA Listings databases, this facility is actively billed for hazardous materials stored onsite. There are no available records of past spills or releases, and due to its downgradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
100 Harden Parkway, LP	1907 Dartmouth Way	500 feet south (downgradient)	CUPA Listings	According to the CUPA Listings databases, this facility was historically billed for hazardous materials onsite. There are no available records of past spills or releases, and due to its downgradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
Natividad Elementary School	Arcadia Street/	4,500 feet south (downgradient)	SCH, ENVIROSTOR	According to the ENVIROSTOR database, this property was investigated for past pesticide use. No pesticide contamination was reported at

	Emerald Drive			concentrations exceeding applicable screening levels, therefore a "no further action" determination was granted and the school was constructed. This property appears unlikely to have impacted the Plan Area.
Nordic Carpet & Upholstery Cleaning	13433 Jackson Street	500 feet east (cross-gradient)	EDR US Hist Cleaners	According to the EDR US Hist Cleaners database, this carpet and upholstery cleaning service operated in 2008. Based on the apparent residential development at this address in 2008, this facility appears unlikely to have impacted the Plan Area.
Towing Depot	218 Boronda Road, Bldg D-7	50 feet south (downgradient)	CUPA Listings	According to the CUPA Listings databases, this facility was historically billed for hazardous materials stored onsite. There are no available records of past spills or releases, and due to its downgradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
Autoworx Service	218 Boronda Road, Bldg C-3	50 feet south (downgradient)	CUPA Listings	According to the CUPA Listings databases, this facility was historically billed for hazardous materials stored onsite. There are no available records of past spills or releases, and due to its downgradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
Ralph Freilingers Auto Service	55 San Juan Grade	200 feet west (cross-gradient)	EDR US Hist Auto Stat	According to the EDR US Historical Auto Stations database, this auto service facility operated in 2008. Based on the apparent residential development at this address in 2008, and its cross-gradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
Rogge Road School	1301 Rogge Road	1,000 feet north (upgradient)	SCH, ENVIROSTOR	According to the ENVIROSTOR database, this property was investigated for past pesticide use. No pesticide contamination was reported at concentrations exceeding applicable screening levels, therefore a "no further action" determination was granted and

				the school was constructed. This property appears unlikely to have impacted the Plan Area.
CA Water Service Company, Station 103	19610 Rogge Road	1,000 feet north (upgradient)	CUPA Listings	According to the CUPA Listings databases, this facility is actively billed for hazardous materials stored onsite. There are no available records of past spills or releases. Although it is upgradient of the Plan Area, this facility appears unlikely to have impacted the Plan Area.
District Office	303 San Juan Grade Road	2,500 feet northeast (upgradient)	CA FID UST, SWEEPS UST, HIST UST	According to the CA FID UST and SWEEPS UST databases, this facility is actively billed for hazardous materials onsite. There are no available records of past spills or releases, and due to its downgradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
Garcias Carpet Cleaners	200 Clinton Court	1,000 feet south (downgradient)	EDR US Hist Cleaners	According to the EDR US Hist Cleaners database, this carper cleaning service operated in 2004 and 2009. Based on the apparent residential development at this address in 2009, and its downgradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
AT&T California-NE120 (Pacific Bell-SLNSCA11, T-Mobile SF05824A)	33 San Juan Grade Road	200 feet west (cross-gradient)	CUPA Listings, SWEEPS UST, UST	According to the CUPA Listings, SWEEPS UST, and UST databases, this facility has a 4,000-gallon UST onsite that is used to store diesel. This is actively billed for hazardous materials stored onsite. There are no available records of past spills or releases, although it is cross-gradient to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
Cecil's Chevron	307 San Juan Grade Road	2,500 feet northeast (upgradient)	UST, EDR Hist Auto Stat, CUPA Listings	According to the UST and CUPA Listings databases, this facility is actively billed for hazardous material stored onsite, likely in one or multiple USTs. There are no available records of past spills or releases. Although it is upgradient relative to the Plan Area, this facility

				appears unlikely to have impacted the Plan Area.

SOURCE: GEOCON, 2016 PHASE I WESTERN AREA SPECIFIC PLAN OF THE BORONDA ROAD FUTURE GROWTH AREA (BRFGA)

GEOTRACKER AND ENVIROSTOR

GeoTracker and the DTSC's EnviroStor website databases (http://www.envirostor.dtsc.ca.gov/public/) for information regarding environmental assessment and cleanup within the Specific Plan Area, or on properties/facilities within 1/4-mile of the Specific Plan Area. No information for the Specific Plan Area, or on properties/facilities within ¼-mile of the Specific Plan Area is available on the GeoTracker web database. Information available and reviewed on the DTSC's EnviroStor website is summarized below by facility.

McKinnon Elementary School, 2100 McKinnon Street — According to statements on the DTSC's EnviroStor website, a PEA report was prepared prior to the construction of the McKinnon Elementary School (APN 211-231-059). According to the EDR database search, the primary contaminants of concern were organochlorine pesticides (OCPs). A "no further action (NFA)" determination was granted to the McKinnon Elementary School by the DTSC on November 22, 2000, based on the conclusions of the report. A NFA determination concluded that there is no risk to potential site users by chemicals present onsite and that the property is suitable for unrestricted future land use. McKinnon Elementary School was built sometime between 2001 and 2005.

Proposed High School, 1100 Rogge Road — The following documents are for a proposed Salinas Union High School District high school on APN 211-011-008:

- PEA report prepared by Kleinfelder, Inc. (Kleinfelder), dated March 2007 and approved by DTSC as Final on April 4, 2007.
- Supplemental Site Investigation (SSI) prepared by Kleinfelder, dated January 2014 (revised April 2014), and approved by DTSC on May 2, 2014.
- Removal Action Work Plan (RAW) prepared by Kleinfelder, dated February 18, 2015 (revised May 8, 2015), and approved by DTSC on October 16, 2015.
- DTSC Work Notice dated January 2016.
- DTSC email confirmation (November 10, 2016) of soil removal.

Summaries of these documents are provided below:

Preliminary Environmental Assessment: A Preliminary Environmental Assessment PEA, performed by Kleinfelder, consisted of the collection and analysis of surface and subsurface soil samples collected in an agricultural area and a residential area (in the northern portion of the property) for NOA, polychlorinated biphenyls (PCBs), OCPs, polycyclic aromatic hydrocarbons (PAHs), California Assessment Manual 17 metals (including lead), and total petroleum hydrocarbons (TPH). NOA and PCBs were not detected at concentrations that exceeded their respective laboratory reporting limits

in the surface and subsurface soil samples. Metal concentrations (including lead) detected in the surface and subsurface soil samples did not exceed their respective regulatory limits. Elevated concentrations of TPH as diesel (TPHd) and motor oil (TPHmo) were detected in the upper six to twelve inches of soil around a 55-gallon oil drum near a demolished building in the residential area. One PAH, dibenz (a,h) anthracene, was detected in two surface samples near the oil drum. Elevated concentrations of chlordane and dieldrin were detected in the soil samples collected at a residence, a storage structure, and the demolished structure in the residential area. The PEA did not identify any contaminants of concern in the surface and subsurface soil samples collected in the agricultural area.

Kleinfelder recommended, prior to the demolition of the structures in the residential area, that a Supplemental Site Investigation be conducted to determine the extent of TPH and PAH in the soils near the oil drum and the extent of OCPs in the soils near the residence, storage structure, and demolished structure. Kleinfelder also recommended the excavation and removal of soils in these areas once the extent of contamination has been defined by the SSI.

Supplemental Site Investigation: The Supplemental Site Investigation (SSI) consisted of additional surface and subsurface soil sampling for OCPs, PAHs, TPH, and benzene, toluene, ethyl benzene, and xylenes (BTEX) to determine the extent of contamination in the residential area. Laboratory analysis identified elevated concentrations of chlordane, dieldrin, and heptachlor epoxide in the soil samples collected within the upper three feet of soil near the residence, storage structure, and demolished structure in the residential area. Kleinfelder recommended removal of approximately 105 cubic feet of soil from the residential area and confirmation sampling following the excavation.

Removal Action Work Plan: The objective of the remedial approach described in the Removal Action Work Plan (RAW) was to mitigate potential risk to human health and the environment by excavation and disposal of approximately 110 cubic yards of contaminated soil. The soil was contaminated with OCPs, TPH, and PAHs. Approximately seven truckloads of contaminated soil were anticipated to be removed from the site. The DTSC approved the RAW on October 16, 2015.

DTSC Work Notice: The DTSC issued a Work Notice for Soil Cleanup Work with an anticipated start date of February 15 to 26, 2016. As indicated in the Work Notice, the Salinas Union High School District is anticipating construction on the new high school to begin mid-2016.

DTSC Email Confirmation of Soil Removal: The DTSC indicated in an email on November 10, 2016, that the soil removal was completed in April 2016 and that a Removal Action Completion Report is being reviewed by DTSC and if they have no additional comments, the removal action will be approved in 2016 (Removal Action Completion Report completed November 28 2016).

MONTEREY COUNTY ENVIRONMENTAL HEALTH DEPARTMENT

A records search for the Specific Plan Area's 12 APNs was requested from the Monterey County Environmental Health Department. The Health Department indicated that they had no documents related to the Specific Plan Area. However, we did receive copies of two Permits to Operate from Mr. Bill Tarp of Triangle Farms (APNs 211-231-012 and -013) who is the owner and user of the

parcels. Mr. Tarp provided the copies during an interview by our representative on December 28, 2015. The permits are for:

- Triangle Farms, Inc., 118 San Juan Grade Road
    - Hazardous Materials Release Response Plan and Inventory
- Triangle Farms, Inc. – Bondesen Ranch
    - Aboveground Petroleum Storage
    - Hazardous Materials Release Response Plan and Inventory
    - Hazardous Waste Generator and On site Hazardous Waste Treatment

MONTEREY COUNTY RESOURCE MANAGEMENT AGENCY

Specific Plan Area records were requested from the Monterey County Resources Management Agency. The records included the Rogge Road High School Site Acquisition EIR (Section 2.7 Hazards and Hazardous Materials), and a Natural Gas Pipeline Risk Analysis, dated July 26, 2006, for the *Proposed Salinas Union High School District Site, 1100 Rogge Road*.

MONTEREY BAY UNIFIED AIR POLLUTION CONTROL DISTRICT

Records were requested from the Monterey Bay Unified Air Pollution Control District (MBUAPCD) for the Specific Plan area. The MBUAPCD identified two records of violations within the Specific Plan Area. A violation was issued to Oesuguerra Harvest Farm, a tenant on APN 211-011-008, for open burning of unauthorized materials on July 15, 2009. A violation was issued to ProSource Farm, a tenant on APN 211-011-011, for open burning of unauthorized materials on September 13, 1996. No other violations were reported.

Historical Use

Historical use of property within the Specific Plan Area and adjacent properties was evaluated through review of historical aerial photographs, historical topographic maps, and city directories provided by EDR. This section summarizes the information obtained from these sources.

AERIAL PHOTOGRAPHS

Historical aerial photographs provided by EDR were reviewed for the years 1956, 1968, 1966, 1971, 1981, 1987, 1998, 2005, 2009, 2010, and 2012 for indications of past land uses that had the potential to have impacted the Specific Plan Area through the use, storage or disposal of hazardous substances and/or petroleum. Table 3.5-3 summarizes observations of the Specific Plan Area and adjacent properties on the aerial photographs.

TABLE 3.5-3 SUMMARY OF AERIAL PHOTOGRAPHY OBSERVATIONS

YEAR	OBSERVATIONS	
	PLAN AREA	ADJACENT PROPERTIES
1956-1968 (1" = 1,000')	Agricultural fields (row crops) were present within the Plan Area. Structures were present in the southwestern portion and two residence areas were present on the eastern edge of the Plan Area.	Agricultural fields and a structure were adjacent to the Plan Area to the east. Agricultural fields were adjacent to the south and southwest of the Plan Area. A residential neighborhood was adjacent to the Plan Area on the northwest.
1971-1981 (1" = 1,000')	Conditions were similar to those observed on the 1968 photograph.	Conditions were similar to those observed in the 1968 photograph, with the addition of a residential neighborhood northwest of the Plan Area in 1971 and to the southwest in 1981. The resolution of the 1981 photograph is poor.
1987 (1" = 1,000')	Conditions were similar to those observed on the 1981 photograph.	Conditions were similar to those observed on the 1981 photograph.
1998 (1" = 500')	Conditions were similar to those observed on the 1987 photograph.	Conditions were similar to those observed in the 1987 photograph, with the addition of residential neighborhoods south of the Plan Area.
2005 (1" = 500')	Conditions were similar to those observed on the 1998 photograph with the addition of the McKinnon Elementary School.	Conditions were similar to those observed on the 1998 photograph.
2009-2012 (1" = 500')	Conditions were similar to those observed on the 2005 photograph.	Conditions were similar to those observed on the 2005 photograph.

SOURCE: GEOCON, 2016 PHASE I WESTERN AREA SPECIFIC PLAN OF THE BORONDA ROAD FUTURE GROWTH AREA (BRFGA)

As described in Table 3.5-3, row crops were present within the Specific Plan Area from sometime prior to 1956 until the present. The agricultural use of the Specific Plan Area dating back to at least 1956 suggests that OCPs and metals such as arsenic and lead may be present in soil within the Specific Plan Area. No other land uses that would suggest the presence of RECs were observed within the Specific Plan Area or adjacent properties in the aerial photographs.

TOPOGRAPHIC MAPS

Historical topographic maps provided by EDR were reviewed for the years 1910, 1912, 1940, 1947, 1948, 1950, 1968, 1975, and 1984. Table 3.5-4 summarizes the observations of the Plan Area and adjacent properties on the historical topographic maps.

TABLE 3.5-4: TOPOGRAPHIC MAPS EVALUATION

YEAR	OBSERVATIONS	
	PLAN AREA	ADJACENT AND VICINITY PROPERTIES
1910 (1: 31,680)	No Plan Area features or land uses are depicted.	Three of the four roads that bound the Plan Area (Rogge Road, Natividad Road, and San Juan Grade Road) are depicted to the north, east, and west of the Plan Area.
1912 (1: 62,500)	Similar to the 1910 map.	Similar to the 1910 map.
1940 (1: 62,500)	One small structure is depicted on the northern side of the Plan Area. Alleys with seven structures are depicted on the western edge of the Plan Area abutting San Juan Grade Road.	Similar to the 1912 map with more development in Salinas encroaching from the west. Three structures are visible north of the Rogge Road and ten structures are visible east of Natividad Road.
1947 (1:62,500, 1:24,000)	The cluster of structures south of Rogge Road had been labeled "Sage." Many of the structures on the western edge of the Plan Area abutting San Juan Grade Road are no longer depicted, but some have been added in clusters. Intermittent streams are depicted draining the northwestern portion of the Plan Area.	Similar to the 1940 map.
1948 (1:25,000)	Similar to the 1947 maps.	Similar to the 1947 maps.
1950-1975 (1:25,000)	Similar to the 1948 maps.	The residential neighborhood northwest of the Plan Area (southeast of the intersection of San Juan Grade Road and Rogge Road) is shaded in purple indicating new development since the prior map.
1984 (1:24,000)	An intermittent pond is depicted in the northeastern corner of the Plan Area. Additional structures (likely residential) are also depicted on the southeastern and southwestern portions of the Plan Area.	Similar to the 1975 map.

SOURCE: GEOCON, 2016 PHASE I WESTERN AREA SPECIFIC PLAN OF THE BORONDA ROAD FUTURE GROWTH AREA (BRFGA)

The topographic maps do not depict any other land uses that would suggest the presence of RECs within the Specific Plan Area or adjacent properties.

CITY DIRECTORIES

EDR prepared an abstract of city directories for the Specific Plan Area, including city, cross reference and telephone directory listings. EDR included information from directories at approximate five-year intervals, if available, from 1960 to 2013. Directories are provided by Street name: E. Boronda Road, Natividad Road, Bogge Road, and San Juan Grade Road.

The names associated with addresses listed in the EDR report consist of various individuals and commercial businesses. None of the listed commercial businesses suggest the storage or use of hazardous substances or petroleum within the Specific Plan Area or adjacent properties.

Site Reconnaissance

This section summarizes observations of the Specific Plan Area and surrounding properties made during a site reconnaissance. Cord Dennig, Senior Staff Scientist with Geocon, performed a site reconnaissance December 28, 2015. Mr. Dennig performed the site reconnaissance by walking throughout the Specific Plan Area, along the Specific Plan Area perimeter, and observing Specific Plan Area features and conditions. The offsite survey was performed by making observations of adjacent properties from the Specific Plan Area and public roads.

OBSERVED SITE SETTING

The Specific Plan Area consists predominantly of agricultural land with a few farm residences and associated agricultural buildings (i.e., barns, warehouses, and storage yards) along the northern, western, and eastern sides of the Specific Plan Area. McKinnon Elementary School is within the southwestern portion of the Specific Plan Area.

Beyond the northern, western and southern boundaries of the Specific Plan Area are residential developments consisting of single family homes, condominiums, and apartments. La Joya Elementary School and a Bolsa Knolls Middle School are within the residential neighborhood adjacent to the northwest of the Specific Plan Area. Santa Rita Elementary School is located within a residential area west of the Specific Plan Area.

ONSITE SURVEY

The following descriptions are based on observations of the 12 parcels that make up the approximately 795-acre Specific Plan Area made during a site visit on December 28, 2015.

APN 211-011-002, 86 San Juan Road: This parcel contains residential buildings, barns, and other outbuildings. At the time of the site visit, access to this property was not available. Mr. Dennig observed three drums stored next to a shed in the eastern portion of the parcel. The contents of these drums are not known. There appears to be an existing well also located in the eastern portion of this parcel next to the drums. There is piping, valves, a centrifugal sand separator which is typically associated with a water supply well. The condition of the well is unknown.

APN 211-011-003: This parcel contains residential buildings, a barn, a fertilizer AST and a storage yard at the western end of the parcel. There is a CUPA permit posted next to the approximately 3,000-gallon fertilizer AST; no fuel storage was visible at the time of the site visit. Several old ASTs are stored adjacent to the barn; they are not in use.

APN 211-011-008 and APN 211-011-011, 1100 Rogge Road: Parcel APN 211-011-008 is entirely agricultural land. Parcel APN 211-011-011 has an abandoned farm residence in the northern portion of the parcel. The abandoned farm residence includes an old residential water well that is apparently also no longer used. The abandoned farm residence includes a residential structure, garage and barn, all of which are empty.

The Salinas Union High School District has a high school proposed for these parcels. As described previously, the DTSC's EnviroStor website (ID 60000165) includes information on the proposed high school. Several reports have been completed for the parcels that include: a PEA in March 2007, Supplemental Site Investigation dated April 2014, a RAW approved by DTSC in October 2015, and a DTSC Work Notice from January 2016.

APN 211-011-009: This parcel is primarily agricultural but includes a residence, several agricultural buildings, including a garage and a storage building in its southeastern portion. An approx. 1,000-gallon diesel AST is present north of the garage. Fertilizer buckets and an unused AST were observed in a building east of the garage.

APN 211-011-010: This approximately 1.7-acre parcel consists of a residence, warehouse, several out buildings, and a storage yard. The parcel is located between APN 211-011-009 and APN 211-231-013 and forms a somewhat continuous 900-foot long area of agricultural operations buildings and equipment storage yards that occupy all three parcels along Natividad Road.

APN 211-231-012 and 211-231-013: These two parcels comprise Triangle Farms. The majority of the parcels are used for agricultural purposes with support structures that include: a residence, wooden water tank and tower (no longer used), water supply well, storage buildings, equipment and vehicle storage, hydraulic oil and motor oil storage in drums, fertilizer storage (dry and bulk liquids), and diesel, gasoline, and waste oil ASTs.

APN 211-231-016: This parcel is entirely agricultural land with unpaved access roads around the perimeter.

APN 211-231-059: This 11.46-acre parcel is occupied by the current McKinnon Elementary School.

APN 211-231-060 and 211-231-061: These two parcels are used for agricultural purposes and have unpaved access roads around the perimeter.

OFFSITE SURVEY

Adjacent properties consisted of the following:

North Single/multi-family residences and similar agricultural land.

East	Agricultural fields.
South	Single/multi-family residences.
West	Single/multi-family residences.

During site surveys, no evidence of RECs was observed on the properties adjacent to Specific Plan Area.

Interviews

Bill Tarp is the owner and operator of Triangle Farms (APN 211-231-012 & -013). Mr. Tarp has been farming the property since 1986. Prior to 1986, the property was farmed by Mr. Tarp's father. As far as Mr. Tarp knows, the entire property was initially developed as a farm and has not had any other industrial or commercial uses.

According to Mr. Tarp, there have never been any USTs on this property and he does not believe that a gas station/service station has ever existed on the property. There is no known use of Transite™ or other asbestos-containing pipe on the property; all irrigation pipe is high-pressure steel. There has been no unauthorized waste dumping on the property, other than occasional used tires. No construction debris has been dumped on the property.

Mr. Tarp stated that pesticide application is performed by outside companies, including The Dune Company of Salinas, NH3 Services Company, Inc., and Crop Production Services Inc. Pesticides are not mixed on the property.

Mr. Tarp is not aware of any environmental liens, land use limitations, environmental regulatory actions or environmental cleanups on the property or adjoining/adjacent properties.

Mr. Tarp states that there was formerly an agricultural well at the corner of San Juan Grade Road and Boronda Road; this location is outside the Specific Plan Area. He also indicated that there is an old residential well at the abandoned homestead in parcel 211-011-011 (site of the proposed high school).

3.5.2 REGULATORY SETTING

FEDERAL

The primary federal agencies that are responsible for overseeing regulations and policies regarding hazardous materials are the Environmental Protection Agency (EPA), Department of Labor Occupational Safety and Health Administration (OSHA), and the Department of Transportation (DOT). Several laws governing the transport, storage, and use of hazardous materials are governed by these agencies as well as oversight for contaminated sites cleanup. Federal laws and regulations that are applicable to hazards and hazardous materials are presented below.

Resource Conservation and Recovery Act

The 1976 Federal Resource Conservation and Recovery Act (RCRA) and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and non-hazardous wastes. The legislation mandated that hazardous wastes be tracked from the point of generation to their ultimate fate in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities.

The 1984 RCRA amendments provided the framework for a regulatory program designed to prevent releases from USTs. The program establishes tank and leak detection standards, including spill and overflow protection devices for new tanks. The tanks must also meet performance standards to ensure that the stored material will not corrode the tanks. Owners and operators of USTs had until December 1998 to meet the new tank standards. As of 2001, an estimated 85 percent of USTs were in compliance with the required standards.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) introduced active federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. CERCLA was intended to be comprehensive in encompassing both the prevention of, and response to, uncontrolled hazardous substances releases. CERCLA deals with environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

Natural Gas Pipeline Safety Act

The Natural Gas Pipeline Safety Act authorizes the U.S. Department of Transportation Office of Pipeline Safety to regulate pipeline transportation of natural (flammable, toxic, or corrosive) gas and other gases as well as the transportation and storage of liquefied natural gas. The Office of Pipeline Safety regulates the design, construction, inspection, testing, operation, and maintenance of pipeline facilities. While the federal government is primarily responsible for developing, issuing, and enforcing pipeline safety regulations, the pipeline safety statutes provide for State assumption of the intrastate regulatory, inspection, and enforcement responsibilities under an annual certification. To qualify for certification, a state must adopt the minimum federal regulations and may adopt additional or more stringent regulations as long as they are not incompatible.

STATE

The primary state agencies that are responsible for overseeing regulations and policies regarding hazardous materials are the California Office of Emergency Services (OES), California Environmental Protection Agency (Cal-EPA), Department of Toxic Substances Control (DTSC), California Department of Transportation (Caltrans), California Highway Patrol (CHP), California Water Quality Control Board, and the California Air Resources Board. Several laws governing the generation, transport, and

disposal of hazardous materials are administered by these agencies. State laws and regulations that are applicable to hazards and hazardous materials are presented below.

California Health and Safety Code

Cal-EPA has established rules governing the use of hazardous materials and the management of hazardous wastes. Many of these regulations are embodied in the California Health and Safety Code. The code includes regulations that govern safe drinking water, substances control, land reuse and revitalization, remediation, restoration, and methamphetamine contaminated cleanups.

California Code of Regulations Title 22 and Title 26

The California Code of Regulations (CCR) Title 22 provides state regulations for hazardous materials, and CCR Title 26 provides regulation of hazardous materials management. In 1996, Cal/EPA established the "Unified Hazardous Waste and Hazardous Materials Management Regulatory Program" (Unified Program) which consolidated the six administrative components of hazardous waste and materials into one program.

LOCAL

City of Salinas General Plan

The City of Salinas General Plan Safety Element contains the following policies related to hazardous materials:

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.

Policy S-3.3: Work with federal and state agencies to identify toxic disposal or leakages and pursue prompt cleanup.

Policy S-3.4: Work with the State, agribusiness and agricultural worker organizations to ensure that agricultural use of pesticides and fertilizers do not negatively affect public health and safety.

Policy S-3.5: Limit hazardous waste facilities within the planning area to transfer stations, which shall be limited to the collection, temporary storage, and transfer of small quantity generator and household hazardous waste as specified in the Monterey County Hazardous Waste Management Plan.

Policy S-3.6: Limit the location of a Hazardous Waste Transfer Station to land designated for General Industrial use and ensure that the station conforms to the siting criteria in the Monterey County Hazardous Waste Management Plan.

Policy S-3.7: Reduce the risk from ground transportation hazards, such as rail, truck, and roadway systems.

Certified Unified Program Agency (CUPA)

The California Environmental Protection Agency designates specific local agencies as Certified Unified Program Agencies (CUPA), typically at the county level. The Monterey County Health Department Hazardous Materials Management Services is the CUPA designated for Monterey County. The Department is responsible for the implementation of statewide programs within its jurisdiction, including: Underground Storage Tanks with hazardous substances (USTs), Hazardous Materials Business Plan (HMP) requirements, California Accidental Release Prevention (Cal-ARP) program, etc. Implementation of these programs involves permitting, inspecting, providing education/guidance, investigations, and enforcement.

3.5.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

The following CEQA Guidelines Appendix G topics were dismissed as less than significant during the Initial Study and NOP process.

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

These topics will not be discussed further in this EIR; please refer to the Initial Study located in Appendix A for further information on these topics. Consistent with Appendix G of the CEQA Guidelines, the proposed Project will have a significant impact from hazards and hazardous materials if it will:

- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.
- Create a significant hazard to school sites due to siting or the placement of infrastructure.

IMPACTS AND MITIGATION MEASURES

Impact 3.5-1: Potential to be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment (Less than Significant with Mitigation)

A Phase I ESA was performed for the Specific Plan Area. The majority of the Specific Plan Area is agricultural land used for row crops (i.e., lettuce, cauliflower, broccoli, and strawberries). Several small clusters of buildings located on the northern, western, and eastern edges of the Specific Plan Area include residences, barns, warehouses, ASTs, and storage yards. These structures have supported the agricultural operations and some have been used or are currently being used to temporarily store fertilizers, pesticides, herbicides, diesel fuel, gasoline, waste oil, and other materials normally associated with ongoing agricultural cultivation.

Due to the long-term use of the land for agricultural purposes, the Specific Plan Area has the potential for certain environmental conditions related to pesticide and herbicide application that could have caused these chemicals to be present in the soil. The Phase I ESA identified the following RECs in connection with the Specific Plan Area:

- Current and historical use of the Specific Plan Area as agricultural lands and application of pesticides and herbicides may have had impacted Plan Area soils with organochlorine pesticides (OCPs) and arsenic.
- Soil in the area of the structures used to support the agricultural operations may be negatively impacted by metals (specifically lead from lead-based paint on older buildings); OCPs from termiticide application; PCBs from window caulking or glazing in old buildings; and TPH as gasoline, diesel, and motor oil.

A Phase II ESA was conducted to evaluate the potential presence of OCPs and arsenic (chemicals of potential concern, COPC) in shallow onsite soils due to the historic agricultural use within the Specific Plan Area. The Phase II ESA included analysis of surface soil samples collected from areas throughout the Specific Plan Area.

The results of the Phase II ESA show that residual OCP concentrations are present in the onsite shallow soils, but at concentrations less than USEPA residential Regional Screening Levels (RSLs). Reported arsenic concentrations are within the range of naturally occurring background levels. Additional assessment of soil in the Specific Plan Area's agricultural fields for OCPs and arsenic does not appear to be warranted at this time.

It is recommended that an evaluation of the soil around the agricultural operations support buildings (residences, warehouses, barns, etc.) be performed before the buildings are demolished, or around the perimeters of the foundations if structures have already been removed. Additionally, based on the age of these structures, it is possible that asbestos-containing materials and/or lead-containing

paint are present in the building materials. An asbestos-containing materials and lead-containing paint survey should be considered prior to demolition of the Specific Plan Area structures.

The hazards assessments included site reconnaissance, interviews, historical land use research, database research, and soils testing. The following mitigation measures will reduce the potential risk of hazards as identified in the hazards assessment. With implementation of the following mitigation measures the proposed Project would have a ***less than significant*** impact with regards to this environmental issue.

MITIGATION MEASURES

Mitigation Measure 3.5-1: *Prior to ground disturbance, or issuance of demolition permits, the applicant shall hire a qualified consultant to:*

> *1) Provide a final evaluation of the soils around the agricultural operations support buildings (residences, warehouses, barns, etc.) before they are demolished. If toxic levels of residual agrichemicals or surface staining are found, the contaminated soil shall be excavated and disposed of at an off-site disposal facility designed to accept such waste. Any contaminated areas shall be remediated by the project applicant in accordance with recommendations made by the Monterey County Health Department Hazardous Materials Management Services, Regional Water Quality Control Board, Department of Toxic Substances Control, or other appropriate federal, state, or local regulatory agencies.*
>
> *2) Investigate structures for asbestos-containing materials and lead. If asbestos-containing materials and/or lead are found in the buildings, a Cal-OSHA certified ACBM and lead based paint contractor shall be retained to remove the asbestos-containing materials and lead in accordance with EPA and California Occupational Safety and Health Administration (Cal/OSHA) standards. In addition, all activities (construction or demolition) in the vicinity of these materials shall comply with Cal/OSHA asbestos and lead worker construction standards. Any ACBM and lead shall be disposed of properly at an appropriate offsite disposal facility.*

Mitigation Measure 3.5-2*: Prior to the issuance of grading permits existing water wells shall be destructed under permit from the Monterey County Health Department. Any destruction of these facilities shall be in accordance with the Monterey County Well Standards* for *Abandonment/Destruction. The project applicant shall provide the City of Salinas with a copy of the permit and a report or other information documenting the appropriate destruction of these facilities.*

Mitigation Measure 3.5-3: *Prior to the issuance of occupancy permits, water wells shall be constructed and tested for water quality under permit from the Monterey County Health Department. The project applicant shall provide the City of Salinas with a copy of the permit and a report or other information documenting the appropriate construction and operation of these facilities.*

Impact 3.5-2: Create a significant hazard to school sites due to siting or the placement of infrastructure (Less than Significant with Mitigation).

The Specific Plan Area is not anticipated to have businesses or uses that would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste.

New and existing infrastructure would be located near existing and planned schools within the Specific Plan Area. The Specific Plan Area (at buildout) includes three elementary schools, one middle school, and one high school (see Section 3.9 Public Services and facilities for additional details on schools within the Planning Area). Existing and planned infrastructure that relates to hazards located within close proximity to these existing and proposed schools include:

- Water well construction and operation (proposed as shown in Section 2.0, Figure 2-6).
- Natural Gas Pipelines (existing as shown on Figure 3.5-1).
- Overhead electrical transmission lines (existing lines located along Boronda Road, proposed realignment along El Dorado Drive as shown in Section 2.0, Figure 2-6).

Three water well sites are proposed within the Specific Plan Area. The locations are denoted in Section 2.0 (Project Description) Figure 2-6 (Specific Plan/Illustrative Plan). These proposed facilities will be subject to the approval of a Conditional Use Permit by the City, and are subject to standards and permitting requirements of the Monterey County Health Department as described in Mitigation Measure 3.5-3.

During operation, the Salinas District of California Water Service (Cal Water Salinas District) is expected to provide potable water service to the WASP. According to Cal Water's Assessment Report, it is expected that the proposed wells within the Specific Plan Area have a high probability of meeting drinking water quality standards. As a hedge against possible future changes in water quality, Cal Water may make provisions for on-site treatment with the design of the wells for the WASP development. To ensure high quality drinking water, Cal Water tests its municipal source water at the source and in the distribution system for compliance with drinking water standards. In 2015, Cal Water conducted tests on approximately 68,000 water samples to ensure compliance with both state and federal drinking water standards. Additionally, all well sites will be screened by a 6-foot tall masonry wall that that limits access to the wells. This access exclusion minimizes potential hazards to adults or children as a result of well placement.

Existing natural gas transmission pipelines are located along Rogge Road and Natividad Road on the perimeter of the Specific Plan Area. The locations of natural gas transmission pipelines near the Specific Plan Area are shown on Figure 3-5-1. California Code of Regulations Title 5, Article 2 (School Sites) § 14010 (Standards for School Site Selection) (h) requires written findings that must state that the site does not contain pipelines which carry hazardous wastes or substances other than a natural gas supply line to that school or neighborhood. Additionally, CCR § 14010 (d) places additional standards if the proposed site is within 1,500 feet of a railroad track easement, and includes the presence of high pressure gas lines near the tracks that could rupture in the event of a derailment. The natural gas pipeline network is designed to provide adequate distribution of natural gas to meet

the demands of residents within the city and Specific Plan Area. Additionally, the nearest railroad lines are located along the southern portion of the city approximately 2.5 miles from the Plan Area at the nearest point. Therefore, the proposed Project does not pose a significant hazard as a result of existing natural gas transmission piping.

Existing overhead electrical transmission lines along Boronda Road are proposed for realignment along El Dorado Drive as shown in Section 2.0, Figure 2-6. The exact alignment of the transmission lines, and kV line type is unknown at the time of preparation of this document. California Code of Regulations Title 5, Article 2 (School Sites) § 14010 (Standards for School Site Selection) (c) requires setbacks from overhead power lines by transmission type. Therefore, because the exact alignment of the proposed power lines and transmission type are unknown this is considered a potentially significant impact.

The proposed project includes mitigation measures that ensure water well construction complies with standards and requirements for well construction established by the Monterey County Health Department. Operation of onsite wells will be regulated by Cal Water and will included water quality testing to ensure water quality meets state and federal drinking water standards. Additionally, well uses within the Specific Plan Area will be screened from adjacent uses.

As described previously, the proposed Project does not pose significant hazards from existing natural gas transmission piping. The following mitigation measure ensures all future electrical transmission alignments are required to comply with California Code of Regulations Title 5, Article 2 (School Sites) § 14010 (Standards for School Site Selection) setback requirements. As such, Implementation of the proposed Project would have a ***less than significant*** impact with regards to this environmental issue.

Mitigation Measure 3.5-4: *The property line of all school sites (even if it is a joint use agreement as described in subsection (o) of § 14010) shall be at least the following distance from the edge of respective power line easements as identified in the California Code of Regulations Title 5, Article 2. School Sites § 14010. Standards for School Site Selection (c).*

- *100 feet for 50-133 kV line.*
- *150 feet for 220-230 kV line.*
- *350 feet for 500-550 kV line.*

Impact 3.5-3: Cumulative impact related to hazards and hazardous materials (Less than Significant and Less than Cumulatively Considerable)

The West Area Specific Plan, in conjunction with cumulative development in the region, includes areas designated for development of a variety of urban, agricultural, and open space uses as defined by the applicable General Plan's. Cumulative development would include continued operation of existing developed area and development of new facilities as allowed under each land use designation.

New development would inevitably increase the use of some hazardous materials within the region, resulting in potential health and safety effects related to hazardous materials use. Any use of hazardous materials must be managed in accordance with federal, state, and local regulations to minimize any risk.

For the most part, potential risks from hazardous materials associated with new and future development would be confined to commercial and industrial areas. There are no specific commercial or industrial users that are proposed with the West Area Specific Plan that would pose a risk related to hazardous materials. Specific users would be required to obtain a conditional use permit, which would allow the City to evaluate any use of hazardous materials in their business operations before the use is approved.

Hazardous materials incidents, if any, are typically site specific and involve accidental spills or inadvertent releases. Associated health and safety risks generally are limited to those individuals using the materials or to persons in the immediate vicinity of the materials. Hazard-related impacts tend to be site-specific and project-specific.

The proposed Project includes the approval and subsequent implementation of a 797-acre Specific Plan Area that includes residential, mixed use commercial, a community park, neighborhood parks, small parks, open space, and storm water detention/retention basins. These uses are not expected to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Additionally, these uses are not expected to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The proposed Specific Plan land uses are not expected to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste.

Implementation of the proposed project would not result in significant increased risks of hazards in the cumulative setting area, nor would it result in any significant off-site or indirect impacts. Mitigation measures have been included to reduce the risk of on-site hazards. Therefore, Implementation of the proposed project would have a less than significant cumulative impact relative to this environmental topic. As such, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to hazards and hazardous materials.

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.5-1: Natural Gas Transmission Pipelines

Sources: PG&E Gas Transmission Pipeline System Map; Monterey County GIS. Map date: June 20, 2016.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.

This section describes the regulatory setting, regional hydrology and water quality, impacts that are likely to result from project implementation, and measures to reduce potential impacts to water quality. This section is based in part on the following documents, reports and studies: *City of Salinas General Plan* (City of Salinas, 2002), *Final Environmental Impact Report, Salinas General Plan* (City of Salinas, 2002), *Draft Hydrology and Water Quality Technical Study for West Area Specific Plan EIR* (Balance Hydrologics, Inc., 2016), *City of Salinas Stormwater Management Plan Update* (City of Salinas, 2013), *California's Groundwater Bulletin 118, Central Coast Hydrologic Region* (Department of Water Resources [DWR], 2003), *California's Groundwater* (DWR, 2003), *and Web Soil Survey* (NRCS, 2015). A comment was received during the public review period for the Notice of Preparation from the Northern Salinas Valley Mosquito Abatement District regarding State Guidelines as it pertains to Mosquito Best Management Practices. No other comments related to hydrology and water quality were received during the public review period for the Notice of Preparation.

3.6.1 EXISTING SETTING

REGIONAL HYDROLOGY

Monterey County is located in the Salinas Valley Groundwater Basin. The Salinas Valley is the largest coastal groundwater basin in Central California. It lies within the southern Coast Ranges between the San Joaquin Valley and the Pacific Ocean, and is drained by the Salinas River. Salinas Valley extends approximately 150 miles from the headwaters to the mouth of the River at Monterey Bay, draining approximately 5,000 square miles.

Water for urban and agricultural use in the Salinas planning area is pumped from wells. Much of the groundwater supply in the planning area is generated through recharge of the basin via the Salinas River. No imported water sources are available and water supplies are limited to the watershed and underlying aquifer. The high dependence on ground water and the growth in water demand by urban and agricultural users has put a strain on ground water resources of the Salinas Valley.

The City of Salinas is located in the Lower Salinas River Watershed. The Lower Salinas River Watershed is the name given by the Regional Water Quality Control Board (RWQCB), Central Coast Region, to the lower portion of the Salinas River and the Salinas Reclamation Canal. Although composed of several sub-watersheds, the name Lower Salinas River Watershed is commonly used to define the geographic scope of Total Maximum Daily Load (TMDL) projects in the region. The Lower Salinas River Watershed is the watershed area of the Salinas River from Gonzales Road downstream to its confluence with Moss Landing Harbor.

The Lower Salinas River Watershed area is characterized by both ephemeral and perennial stream reaches, as the Lower Salinas River runs dry during the summer months, and the lower Reclamation Ditch flows year-round. Surface water sources include precipitation, releases from reservoirs, groundwater, and return flows from agricultural irrigation. Mean annual precipitation in the area ranges from approximately 13 to 16 inches per year with the majority of precipitation

occurring between November and April. Land use in the Specific Plan Area includes intensive agriculture as well as the urban centers of Salinas, Castroville and Prunedale.

Climate

The Salinas Valley is oriented northwest-southeast and is parallel to the Pacific Coast. The proximity of the ocean to the open valley mouth, along with prevailing northwesterly winds, tend to give Salinas a moderate climate year-round. The average temperature is 68.2 degrees, with summer temperatures in the 70s, dipping at night into the 50s. Winter temperatures are generally in the low 60s, dropping at night into the middle 30s.

Rainfall in the Specific Plan Area and contributing watershed is relatively uniform across the area. Average annual rainfall is calculated to be approximately 15.5 to 16.1 inches. Average rainfall depths have been estimated to be 2.4 to 2.5 inches for the 10-year, 24-hour event and 4.0 to 4.2 inches for the 100-year, 24-hour event. Monthly evapotranspiration in the project vicinity varied from 1.5 to 4.7 inches in 2015, with a total for that year of 38.0 inches.

Watersheds

A watershed is a region that is bound by a divide that drains to a common watercourse or body of water. Watersheds serve an important biological function, oftentimes supporting an abundance of aquatic and terrestrial wildlife including special-status species and anadromous and native local fisheries. Watersheds provide conditions necessary for riparian habitat.

The State of California uses a hierarchical naming and numbering convention to define watershed areas for management purposes. This means that boundaries are defined according to size and topography, with multiple sub-watersheds within larger watersheds. Table 3.6-1 shows the primary watershed classification levels used by the State of California. The second column indicates the approximate size that a watershed area may be within a particular classification level, although variation in size is common.

TABLE 3.6-1. STATE OF CALIFORNIA WATERSHED HIERARCHY NAMING CONVENTION

WATERSHED LEVEL	*APPROXIMATE SQUARE MILES (ACRES)*	*DESCRIPTION*
Hydrologic Region (HR)	12,735 (8,150,000)	Defined by large-scale topographic and geologic considerations. The State of California is divided into ten HRs.
Hydrologic Unit (HU)	672 (430,000)	Defined by surface drainage; may include a major river watershed, groundwater basin, or closed drainage, among others.
Hydrologic Area (HA)	244 (156,000)	Major subdivisions of hydrologic units, such as by major tributaries, groundwater attributes, or stream components.
Hydrologic Sub-Area (HSA)	195 (125,000)	A major segment of an HA with significant geographical characteristics or hydrological homogeneity.

SOURCE: CALIFORNIA DEPARTMENT OF WATER RESOURCES, 2012.

Hydrologic Region

Monterey County is located in the Central Coast Hydrological Region. The Central Coast Hydrological Region covers approximately 7.22 million acres (11,300 square miles) in central California. This Hydrological Region includes all of Santa Cruz, Monterey, San Luis Obispo, and Santa Barbara counties, most of San Benito County, and parts of San Mateo, Santa Clara, and Ventura counties. Significant geographic features include the Pajaro, Salinas, Carmel, Santa Maria, Santa Ynez, and Cuyama valleys; the coastal plain of Santa Barbara; and the Coast Range. Major drainages in the region include the Salinas, Cuyama, Santa Ynez, Santa Maria, San Antonio, San Lorenzo, San Benito, Pajaro, Nacimiento, Carmel, and Big Sur Rivers.

The Central Coast Hydrological Region has 50 delineated groundwater basins. Within this region, the Gilroy-Hollister Valley and Salinas Valley groundwater basins are divided into four and eight subbasins, respectively. Groundwater basins in this Hydrological Region underlie about 2.39 million acres (3,740 square miles) or about one-third of the Hydrological Region.

Locally, groundwater is an extremely important source of water supply. An estimated 95 percent of all water used in Monterey County is derived from groundwater wells. With nearly 200,000 acres of land under cultivation in the Salinas Valley, agricultural pumping exceeds 495,000 acre-feet per year. Combined with urban and other uses, total water pumped in the Salinas Valley is approximately 520,000 acre-feet per year. Monterey County Water Resources Agency (MCWRA) has estimated that the annual non-drought overdraft of the Salinas Basin is approximately 45,300 acre-feet per year. During droughts, the annual overdraft can escalate to between 150,000 and 300,000 acre-feet per year. Groundwater pumped from the Salinas Valley Groundwater Basin since 2011 has been stead, with a high of 19,060 acre-feet in 2013 and a low of 14,659 acre-feet in 2015.

Aquifers are varied and range from large extensive alluvial valleys with thick multilayered aquifers and aquitards to small inland valleys and coastal terraces. Several of the larger basins provide a dependable and drought-resistant water supply to coastal cities and farms.

Conjunctive use of surface water and groundwater is a long-standing practice in the region. Several reservoirs including Hernandez, Twitchell, Lake San Antonio, and Lake Nacimiento are operated primarily for the purpose of groundwater recharge. The concept is to maintain streamflow over a longer period than would occur without surface water storage and thus provide for increased recharge of groundwater. Seawater intrusion is a major problem throughout much of the region. In the Salinas Valley Groundwater Basin, seawater intrusion was first documented in the 1930s and has been observed more than five miles inland.

The western portion of the Specific Plan Area is located in the Alisal Slough-Tembladero Slough Watershed and the eastern portion of the Specific Plan Area is located in the Natividad Creek-Gabilan Creek Watershed. See Figure 3.6-1.

Groundwater

The City of Salinas is located in the Salinas Valley Groundwater Basin Area. The Salinas Valley Groundwater Basin is un-adjudicated and is currently in overdraft. However, a basin management

plan has been created and the DWR has listed the basin as a high priority. The California State Water Resources Control Board (SWRCB) has initiated adjudication proceedings in the event that MCWRA is not able to effectively reduce the overdraft. In a letter dated June 12, 1997 to MCWRA, the SWRCB initiated the Salinas Valley Groundwater Adjudication process by holding a public hearing as specified in Section 2101 of the Water Code. This potential adjudication proceeding was due to a concern by the SWRCB of seawater intrusion and nitrate contamination in the groundwater basin. In March of 1998, the SWRCB cited that MCWRA had made significant progress on addressing some of the issues it needed to accomplish in order to address that Board's concerns. In the same letter, the SWRCB stated that it "considers the water quality problems in the Salinas Valley to be among the most critical water resources issue in the State" and consequently "encourages continued cooperation from all of the stakeholders to find a local solution for the groundwater problems."

These water quality concerns have been addressed through the Nitrate Management Program established by the agency, as well as the public planning processes that have led to the Salinas Valley Water Project. The implementation of the Salinas Valley Water Project, the Well Relocation Project, the Urban Recycled Water Project, and the Salinas River Fish Habitat Monitoring Program will complement efforts that are currently taking place in the Salinas River watershed in assisting DWR and SWRCB in meeting statewide priorities.

The Monterey County Groundwater Management Plan was prepared in May 2006. The purpose of the Plan is "to provide a comprehensive overview of the Salinas Valley Groundwater Basin and to recommend various management strategies for the basin." This is the most recent Groundwater Management Plan for the region.

The Salinas Valley Groundwater Basin is divisible into eight area subbasins: 180/400-Foot Aquifer; Eastside Aquifer; Forebay Aquifer; Upper Valley Aquifer; Paso Robles Area; Seaside Area; Langley Area; and Corral de Tierra Area.

Groundwater pumping throughout the Salinas Valley has contributed to the overdraft of the groundwater basin. MCWRA numbers indicate that water levels have declined in all four of the basin's areas. However, the minor declines in the Upper Valley and Forebay areas appear to be in response to drought conditions. Releases from the San Antonio and Nacimiento Reservoirs serve to recharge and have historically stabilized groundwater levels in these two areas. Declines since 1987 are believed to be the result of reduced recharge supplies.

Seawater has advanced into the 180 Foot aquifer to within one mile of Cal Water's closest well. When possible, Cal Water shifts groundwater pumping from the 180 Foot and Eastside aquifers to wells further south and in the 400 Foot aquifer of the Pressure Area.

Groundwater levels in District wells experience an annual variance of approximately 35 feet. Since 1961, the average static groundwater levels in District wells has changed elevation during drought years. In 1976 and 1977, the running average level declined by 20 feet. Recovery occurred in 1982 and 1983 when storm runoff refilled local reservoirs increasing groundwater recharge. With extended drought conditions commencing in 1984, the running average elevation again began

declining and by the summer of 1992 had dropped by 35 feet. Despite four years of drought between 2011 and 2015, average static groundwater levels have remained relatively constant.

Much of the groundwater in the region is characterized by calcium sulfate to calcium sodium bicarbonate sulfate water types because of marine sedimentary rock in the watersheds. Aquifers intruded by seawater are typically characterized by sodium chloride to calcium chloride, and have chloride concentrations greater than 500 mg/L. In several areas, groundwater exceeds the MCL for nitrate.

A total of 28 wells supply the City of Salinas service area. The City of Salinas service area is the largest service area in the Salinas District. The design capacity of active operational wells is 27,880 gallons per minute (gpm) or 40 million gallons per day (mgd) or 44,843 acre-feet per year (AFY) of water. In addition, Cal Water has three new wells being constructed and scheduled to become operational in 2017 and 2018. Well capacities range from 500 gallons per minute (gpm) to 2,000 gpm. It is assumed that the three new wells will have an average design capacity of 1,200 gpm for a total of 3,600 gpm or 5.18 mgd, which is equivalent to 5,812 AFY.

LOCAL SETTING

The topography of the Specific Plan Area is nearly flat, with little change in elevation. The overall slope from northeast to southwest is approximately 0.3%, and there are no natural streams or water bodies present. Although this area is currently being farmed, it contains limited development. Most agricultural activity on-site and in the immediate vicinity has consisted of cultivation of various types of row crops. The site has been heavily disturbed for years from agricultural practices.

Groundwater

The western portion of the Specific Plan Area is located in the Alisal Slough-Templadero Slough watershed and the eastern portion of the Specific Plan Area is located in the Natividad Creek-Gabilan Creek watershed. Surficial soils are primarily alluvium formed by alluvial fan deposits, with incomplete separation of the pressure aquifers from the surface by aquitards. Groundwater underlying the Specific Plan Area has direct connection to the surface and lies at depths of 40 to 60 feet.

Over-drafting of the pressure aquifers (confined by aquitards) and surface aquifers in the lower Salinas Valley continues to be a problem, resulting in seawater intrusion into the aquifers. The extent of seawater intrusion in the pressure aquifers is limited to areas west of Highway 101. Impact of seawater intrusion on aquifers underlying the Specific Plan Area is negligible. However, recharge of the aquifers via infiltration from surface flows and steams (Santa Rita and Gabilan in the plan area) supports groundwater quality in the underlying aquifers and helps to limit seawater intrusion to the west. Therefore, maintenance of recharge to the groundwater basin is an important priority.

Groundwater quality data reported in the Monterey Bay and Salinas Valley Groundwater Ambient Monitoring and Assessment study shows that water quality for the 400-foot aquifer (a confined

aquifer in the lower Salinas Valley which is located approximately 400 feet below the valley floor) in the vicinity of the Specific Plan Area meets drinking water standards for all constituents except for Radon-222.

Nitrate contamination of surficial aquifers and some deeper aquifers used for water supply is a significant problem in the Salinas Valley. "Technical Report 4: Groundwater Nitrate Occurrence" states that numerous water supply wells in the Salinas Valley have been "closed" due to nitrate contamination. Further, the report states that, as of 1988, 48 percent of the monitoring wells located in the unconfined aquifer regions had nitrate measurements which exceed the nitrate maximum concentration limit (MCL) for drinking water. The report identifies rising trends in groundwater nitrate concentrations from 1978 through 2007, with the eastside area (where the Specific Plan Area is located) average nitrate concentrations increasing from 40 milligrams per liter (mg/L) to 105 mg/L during that period. The California Groundwater Ambient Monitoring and Assessment Program (GAMA) special study on nitrate fate and transport in the Salinas Valley states that geochemical and isotopic results for groundwater samples containing nitrate have a signature consistent with inorganic fertilizers, demonstrating that the primary source of nitrate contamination of Salinas Valley groundwater is agriculture.

Drainage

The City's storm drainage system consists of approximately 74 miles of the larger storm drains from 24- to 84-inches in diameter, as well as some 18-inch drainage pipes. The City's system also contains many local storm drains that are 18-inches and smaller in diameter that were not modeled. Most of the existing pipes are reinforced concrete pipe or cast-in-place concrete.

The Salinas River Storm Drainage Pump Station and Blanco Detention Basin are located at the site of the former wastewater treatment plant at the southwest City boundary. A 66-inch corrugated metal outfall conveys flows to the Salinas River. During low flow conditions, gravity discharge can occur. When the flow increases, it is pumped to the river. The pump station has two pumps with a peak capacity of 110 cubic feet per second (cfs). If inflow exceeds the pump station capacity, it is stored temporarily in the Blanco Detention Basin, which has a capacity of 36 acre-feet (AF) with freeboard, and up to 50 AF when the freeboard is used and the basin is completely full.

There are three small lift stations to drain localized low spots at major underpasses. Two lift stations are owned and operated by the City: one at the Alisal Street underpass, and one at Front and Market Streets. The third lift station on North Main north of Market Street is owned by Caltrans and operated by the City.

The City's storm drainage system conveys runoff to the following major receiving waters: Reclamation Ditch, Carr Lake, Gabilan Creek, Natividad Creek, Santa Rita Creek, Markeley Swamp, and the Salinas River. The existing City of Salinas storm drainage system is shown in Figure 3.6-2.

The Reclamation Ditch is a major drainage channel that flows from east to west through the City. Most of the City drains to the Reclamation Ditch, which was constructed in 1917 following formation of Reclamation District No. 1665. Carr Lake is a dry lakebed on the Reclamation Ditch that now functions as detention storage for the ditch during winter rainy periods.

Natividad Creek and Gabilan Creek originate north of the City, then flow south through the City and drain to the Carr Lake area. At Carr Lake, both Gabilan and Natividad Creeks are tributary to the Reclamation Ditch. During major storms with high backwater in the Reclamation Ditch, these creeks overflow at their downstream end and inundate large areas of Carr Lake.

The total incorporated area that drains to the Reclamation Ditch system within the City is about 13 square miles, and comprises most of the northern and eastern parts of the City.

The Santa Rita Creek watershed is a small watershed of about 0.5 square mile in the northwestern part of the City. The Markely Swamp watershed is a small watershed of about 2 square miles on the west side of the City. Both these small watersheds drain out of the City to the west and south. Runoff from Santa Rita Creek and Markely Swamp eventually reaches the Reclamation Ditch to the west of the City boundary.

The Salinas River watershed comprises about 2.5 square miles of the southwestern part of the City that drains to the southwest corner of the City. Runoff is then conveyed south to the Salinas River.

Flooding

Flooding events can result in damage to structures, injury or loss of human and animal life, exposure of waterborne diseases, and damage to infrastructure. In addition, standing floodwater can destroy agricultural crops, undermine infrastructure and structural foundations, and contaminate groundwater.

Predicted flood conditions in the vicinity of the Specific Plan Area are shown on FEMA FIRM panels 06053C0207G, 06053C0209G, and 06053C0226G. Delineated flood zones are limited to a small area designated as shaded Zone X immediately east of San Juan Grade Road and south of Norman Way. Flood conditions in Zone X ("Other Flooded Areas") are limited to less than one-foot depth during the 100-year event and/or are subject to flooding between the 100- and 500-year events. The extent of flooding is naturally limited by existing topography. The parts of the Specific Plan Area outside of the shaded Zone X are designated Zone X - minimal flood hazard and would not be expected to have a flood hazard up to the level of the 500-year event. Lands designated as Zone X are outside of the Special Flood Hazard Areas. Changes to land surfaces in these areas do not trigger map revisions and no flood insurance requirements are imposed on structures in these areas.

Figure 3.6-3 shows the flood boundaries as delineated by the FEMA FIRM and USACE.

Dam Failure

The Specific Plan Area is not located within dam failure inundation areas. Potential inundation from the Nacimiento Dam and the San Antonio Dam are shown in Figure 3.6-4. Dam failure is generally a result of structural instability caused by improper design or construction, instability resulting from seismic shaking, or overtopping and erosion of the dam. Larger dams that are higher than 25 feet or with storage capacities over 50 acre-feet of water are regulated by the California Dam Safety Act, which is implemented by the California Department of Water Resources, Division of Safety of Dams (DSD). The DSD is responsible for inspecting and monitoring these dams. The Act

also requires that dam owners submit to the California Office of Emergency Services inundation maps for dams that would cause significant loss of life or personal injury as a result of dam failure. The Monterey County Multi-Jurisdictional Hazard Mitigation Plan outlines the mitigation strategy for reducing potential losses identified in the vulnerability analysis section of the Plan.

Stormwater Quality

Potential hazards to surface water quality include the following nonpoint pollution problems: high turbidity from sediment resulting from erosion of improperly graded construction projects, concentration of nitrates and dissolved solids from agriculture or surfacing septic tank failures, contaminated street and lawn run-off from urban areas, and warm water drainage discharges into cold water streams.

The most critical period for surface water quality is following a rainstorm which produces significant amounts of drainage runoff into streams at low flow, resulting in poor dilution of contaminates in the low flowing stream. Such conditions are most frequent during the fall at the beginning of the rainy season when stream flows are near their lowest annual levels. Besides the greases, oils, pesticides, litter, and organic matter associated with such runoff, heavy metals such as copper, zinc, and cadmium can cause considerable harm to aquatic organisms when introduced to streams in low flow conditions.

Urban stormwater runoff was managed as a non-point discharge (a source not readily identifiable) under the Federal Water Pollution Control Amendments of 1972 (PL 92-500, Section 208) until the mid-1980's. However, since then, the Federal Environmental Protection Agency has continued to develop implementing rules which categorize urban runoff as a point source (an identifiable source) subject to National Pollution Discharge Elimination System (NPDES) permits. Rules now affect medium and large urban areas, and further rulemaking is expected as programs are developed to meet requirements of Federal water pollution control laws.

Surface water pollution is also caused by erosion. Excessive and improperly managed grading, vegetation removal, quarrying, logging, and agricultural practices all lead to increased erosion of exposed earth and sedimentation of watercourses during rainy periods. In slower moving water bodies these same factors often cause a buildup of siltation, which ultimately reduces the capacity of the water system to percolate and recharge groundwater basins, as well as adversely affecting both aquatic resources and flood control efforts.

Some runoff from the Specific Plan Area currently flows to Santa Rita Creek and some runoff flows to Gabilan Creek via existing storm drains. Gabilan Creek flows into the Carr Lake basin, while Santa Rita Creek flows westward and enters the Reclamation Ditch near Castroville. The existing storm drain system with inlets along Boronda Road at the east side of the Specific Plan Area currently receive runoff from the Specific Plan Area and will receive some of the future project runoff, conveying it to Carr Lake and the Reclamation Ditch at Carr Lake.

Multiple agencies have water quality monitoring sites along Gabilan Creek, Natividad Creek, and in the Carr Lake Basin. California State University (CSU), Monterey Bay (Casagrande and Watson 2007) summarized water quality conditions at these monitoring sites in their evaluation of the

potential benefits of conversion Carr Lake into a multiple-use park. Their comments on the trends in water quality at Carr Lake include the following:

- Water quality conditions are variable, but generally are degraded by intensive agriculture and urban land uses;
- During summer and when water is present, dissolved oxygen, nutrients, suspended sediment, and fecal coliform concentrations commonly exceed established water quality objectives; and
- During winter, high suspended sediment and nutrient concentrations are common.

CSU Monterey Bay (Inman, et al 2014) measured streamflow and water quality in the Reclamation Ditch as part of their Central Coast Watershed Studies program. The sampling data for points along the Reclamation Ditch closest to Carr Lake were taken at the Boronda Road and Davis Road sites. Measurements were taken between November 11 and December 2, 2014. Low dissolved oxygen levels (DO) were not found, nor were high salinity or total dissolved solids (TDS) measurements. High turbidity appeared to be correlated, as expected, to rainfall related runoff.

303(d) Impaired Water Bodies: Section 303(d) of the federal Clean Water Act requires States to identify waters that do not meet water quality standards or objectives and thus, are considered "impaired." Once listed, Section 303(d) mandates prioritization and development of a Total Maximum Daily Load (TMDL). The TMDL is a tool that establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the States to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

According to the California Water Quality Control Monitoring Council, which is part of California Environmental Protection Agency, Natural Resources, there are many areas within Monterey County which are considered Section 303(d) impaired waterbodies. Those areas in the regional vicinity of the Specific Plan Area that are impaired include Gabilan Creek, Natividad Creek, and Santa Rita Creek.

3.6.2 REGULATORY SETTING

There are a number of regulatory agencies whose responsibility includes the oversight of the water resources of the state and nation including the Federal Emergency Management Agency, the US Environmental Protection Agency, the State Water Resources Board, and the Regional Water Quality Control Board. The following is an overview of the federal, state and local regulations that are applicable to the proposed Project.

FEDERAL AND STATE

Clean Water Act (CWA)

The Clean Water Act (CWA), initially passed in 1972, regulates the discharge of pollutants into watersheds throughout the nation. Section 402(p) of the act establishes a framework for regulating municipal and industrial stormwater discharges under the NPDES Program. Section

402(p) requires that stormwater associated with industrial activity that discharges either directly to surface waters or indirectly through municipal separate storm sewers must be regulated by an NPDES permit.

The State Water Resources Control Board (SWRCB) is responsible for implementing the Clean Water Act and does so through issuing NPDES permits to cities and counties through regional water quality control boards. Federal regulations allow two permitting options for stormwater discharges (individual permits and general permits). The SWRCB elected to adopt a statewide general permit (Water Quality Order No. 2013-001-DWQ-DWQ).

Federal Emergency Management Agency (FEMA)

Monterey County is a participant in the National Flood Insurance Program (NFIP), a Federal program administered by FEMA. Participants in the NFIP must satisfy certain mandated floodplain management criteria. The National Flood Insurance Act of 1968 has adopted as a desired level of protection, an expectation that developments should be protected from floodwater damage of the Intermediate Regional Flood (IRF). The IRF is defined as a flood that has an average frequency of occurrence on the order of once in 100 years, although such a flood may occur in any given year. Communities are occasionally audited by the Department of Water Resources to insure the proper implementation of FEMA floodplain management regulations.

California Water Code

The Federal Clean Water Act places the primary responsibility for the control of surface water pollution and for planning the development and use of water resources with the states, although this does establish certain guidelines for the States to follow in developing their programs and allows the Environmental Protection Agency to withdraw control from states with inadequate implementation mechanisms.

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act). The Porter-Cologne Act grants the State Water Resource Control Board (SWRCB) and each of the RWQCBs power to protect water quality, and is the primary vehicle for implementation of California's responsibilities under the Federal Clean Water Act. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a water quality control plan (Basin Plan) for its region the regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

The Water Code Section 13260 requires all dischargers of waste that may affect water quality in waters of the state to prepare and provide a water quality discharge report to the RWQCB. Section 13260a-c is as follows:

(a) Each of the following persons shall file with the appropriate regional board a report of the discharge, containing the information that may be required by the regional board:

(1) A person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a community sewer system.

(2) A person who is a citizen, domiciliary, or political agency or entity of this state discharging waste, or proposing to discharge waste, outside the boundaries of the state in a manner that could affect the quality of the waters of the state within any region.

(3) A person operating, or proposing to construct, an injection well.

(b) No report of waste discharge need be filed pursuant to subdivision (a) if the requirement is waived pursuant to Section 13269.

(c) Each person subject to subdivision (a) shall file with the appropriate regional board a report of waste discharge relative to any material change or proposed change in the character, location, or volume of the discharge.

National Pollutant Discharge Elimination System (NPDES)

National Pollutant Discharge Elimination System (NPDES) permits are required for discharges of pollutants to navigable waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, the ocean, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the Federal Clean Water Act, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.).

The RWQCB issues these permits in lieu of direct issuance by the Environmental Protection Agency, subject to review and approval by the Environmental Protection Agency Regional Administrator. The terms of these NPDES permits implement pertinent provisions of the Federal Clean Water Act and the Act's implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti- degradation. In general, the discharge of pollutants is to be eliminated or reduced as much as practicable so as to achieve the Clean Water Act's goal of "fishable and swimmable" navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also Waste Discharge Requirements issued under the authority of the CWA.

These NPDES permits regulate discharges from publicly owned treatment works, industrial discharges, stormwater runoff, dewatering operations, and groundwater cleanup discharges. NPDES permits are issued for five years or less, and are therefore to be updated regularly. The SWRCB has adopted several general NPDES permits, each of which regulates numerous discharges

of similar types of wastes. The SWRCB has issued general permits for stormwater runoff from industrial and construction sites statewide. Stormwater discharges from industrial and construction activities in the Central Coast Region can be covered under these general permits, which are administered jointly by the SWRCB and RWQCB.

The California Municipal Storm Water Permitting Program regulates storm water discharges from municipal separate storm sewer systems (MS4s). Under phase I of the MS4 permit program, the California RWQCB issued an NPDES permit to the City of Salinas which regulates development within city limits (Central Coast Regional Water Quality Control Board, May 2012). This permit imposes multiple regulations on the City of Salinas in operating its storm sewer system (MS4), including the following key requirements:

1) Listed impairments to receiving waters from the Specific Plan Area (Santa Rita Creek, Gabilan Creek, Reclamation Ditch) include: nitrate, ammonia, fecal coliforms, E. Coli, Turbidity, priority organics, pesticides, copper, and low pH.

2) Discharges which contribute to exceedances of water quality standards and are not reduced to the maximum extent practicable are prohibited.

3) Projects in future growth areas (including the project) are required to manage rainfall at the source using uniformly distributed decentralized controls, natural treatment, and volume reduction BMPs (e.g. bio-retention, vegetated swales, filter strips) as the first means of meeting stormwater management criteria.

4) Erosion and sediment control BMPs shall be installed to reduce pollutant discharges from construction areas and to control ongoing sediment production from slopes and channels.

5) Soil stabilization shall be implemented on disturbed areas immediately following the completion of earth disturbing activities.

6) Source control BMPs shall be implemented in projects to minimize the discharge of pollutants.

The NPDES permit also identifies one Total Maximum Daily Load limitation – fecal coliform concentrations in receiving waters must not exceed 200 MPN/100 mL. Discharges to the receiving waters which cause an exceedance of this criterion must be prevented.

Water Quality Control Plan for the Central Coastal Basin

The Water Quality Control Plan for the Central Coastal Basin (Basin Plan) includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term “water quality standards,” as used in the Federal Clean Water Act, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards.

The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region's ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes, where they are known. For water bodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plan reflects, incorporates, and implements applicable portions of a number of national and statewide water quality plans and policies, including the California Water Code and the Clean Water Act.

LOCAL

City of Salinas General Plan

The Salinas General Plan establishes the following policies relative to hydrology and water quality in the General Plan:

CONSERVATION/OPEN SPACE ELEMENT

Policy COS-1.5: Cooperate with the Monterey County Water Resources Agency, the State Water Resources Control Board and the Regional Water Quality Control Board to implement programs that address the two primary causes of poor water quality in the planning area: salt water intrusion and nitrate contamination.

Policy COS-1.6: Enforce national (NPDES) requirements and participate in regional efforts to protect and enhance water quality.

LAND USE ELEMENT

Policy LU-8.1: Actively coordinate and work with MCWRA to provide and maintain necessary flood control facilities. Policy LU-8.2: Apply appropriate development standards and fees to improve present drainage systems and provide adequate storm water detention basins and sedimentation ponds with new construction.

Policy LU-8.3: Require new development, to the extent feasible, to provide flood control facilities that are visually attractive and ecologically beneficial, and require on-going maintenance of the facilities by the development through a maintenance district.

Policy LU-8.4: Continue the use of Carr Lake as a reclamation/flood control facility in addition to its other functions in addressing water quality, enhancing traffic/circulation, and creating recreational opportunities.

City of Salinas General Plan EIR

The following mitigation measures were established in the City of Salinas General Plan EIR to reduce impacts to hydrology and water quality:

> **Mitigation Measure HW1.** The City will implement Implementation Program COS-1 on an ongoing basis and in response to development proposals. Implementation Program COS-1 requires new development projects and substantial rehabilitation projects to incorporate Best Management Practices (BMPs) pursuant to the National Pollutant Discharge Elimination System (NPDES) permit to ensure the City complies with applicable state and federal regulations.
>
> **Mitigation Measure HW4.** The City will implement Implementation Program COS-3 on an ongoing basis. Implementation Program COS-3 requires the City, consistent with County of Monterey Draft General Plan Policy ER6.3, if adopted, to cooperate with Monterey County, the Regional Water Quality Control Board Central Coast (Region 3) and the Monterey County Water Resources Agency (MCWRA), providing technical assistance when necessary to help identify, protect, and preserve critical aquifer recharge areas so that their function is maintained and ground water quality is not further degraded.
>
> **Mitigation Measure HW5.** The City will implement Implementation Program LU-17, on an ongoing basis. Implementation Program LU-17 requires, as a condition of project approval, new development to provide adequate storm water and flood management facilities to control direct and indirect erosion and discharges of pollutants and/or sediments so that "no net increase in runoff" occurs as a result of the proposed project. In order to determine the facility and Best Management Practices (BMP) needs, the City will require, when necessary, a hydrological/drainage analysis to be performed by a certified and City-approved engineer, with the cost of said analysis the responsibility of the project applicant.

City of Salinas Municipal Code

In 2012 the Central Coast RWQCB adopted Order No. R3-2012-0005, which is the City's NPDES Permit (Permit No. CA0049981) for municipal storm water and urban runoff discharges within the City. To comply with the permit, the City developed a variety of storm water management programs to effectively prohibit non-storm water discharges and to reduce the discharge of pollutants to the maximum extent practicable, including the *Storm Water Management Plan* (SWMP). The SWMP is based on the requirements and guidelines contained in the City's NPDES Permit, as well as relevant portions of other local and regional storm water guidance documents and programs. In compliance with the Phase I regulations, the SWMP is a comprehensive document designed to reduce the discharge of pollutants to the maximum extent practicable and to protect water quality. The SWMP includes all of the required and recommended control programs for municipal facilities, industrial facilities, and commercial facilities. The SWMP programs include urban runoff control policies, outreach and education efforts, site visits and inspections. These programs guide the implementation of specific stormwater BMPs.

Chapter 29 of the Salinas Municipal Code, known as the "City of Salinas Storm Water Management and Discharge Control Ordinance" states:

> The purpose and intent of this chapter is to ensure the health, safety and general welfare of citizens, and protect the water quality of watercourses and water bodies in a manner pursuant to and consistent with the requirements of the NPDES permit issued to the city of Salinas by the California Regional Water Quality Control Board and the Federal Clean Water Act (33 U.S.C. Section 1251 et seq.) by reducing pollutants in urban storm water discharges to the maximum extent practicable and by effectively prohibiting non-storm water discharges to the storm sewer drain system. The provisions of this chapter shall be implemented and enforced in such a manner as to prevent or reduce downstream erosion, to protect stream habitat and to implement controls for the post-development runoff and discharges. To that end, development within the jurisdictional authority of the city of Salinas shall be done in a manner consistent with low impact development guidance set forth in the storm water development standards document established by the city of Salinas.

City of Salinas Stormwater Standards for New and Redevelopment Projects

Local stormwater management regulations are provided in the "Stormwater Standards for New and Redevelopment Projects", referred to as the Salinas Stormwater Development Standards (SWDS). This update of the SWDS was made in part to incorporate the requirements of the updated NPDES permit issued to the City.

The purpose of these SWDS is to assist project applicants for new and redevelopment projects in complying with stormwater management requirements set forth by both the City of Salinas and the Central Coast RWQB. New and redeveloped projects are required to implement Low Impact Development (LID) principles. The Stormwater Standards for New and Redevelopment Projects contains both stormwater design requirements and LID design guidance. LID features are intended to minimize the impacts of urban runoff to receiving waters and to promote healthy watersheds. LID features are designed to capture and treat runoff from relatively frequent rainfall events and are designed to promote infiltration where feasible.

City of Salinas Stormwater Master Plan

The City of Salinas Stormwater Master Plan makes the following statements regarding the potential effects of urbanization in the Specific Plan Area:

- Existing storm drains within Salinas are at maximum capacity and cannot accept increased peak flows without causing additional flooding.
- Certain reaches of Santa Rita Creek through the city are already at capacity and cannot accept increased peak flow rates without flooding.

- Detention storage will be required for all new development that contributes to the Markeley Swamp stormwater sub-system and to the Santa Rita Creek stormwater sub-system.
- Detention storage will be required for all new development in the WASP area that contributes to Gabilan Creek, to avoid adversely impacting Carr Lake and the Reclamation Ditch.
- The hydraulic capacity of the Boronda Road storm drain flowing to Gabilan Creek is 50 cfs for the 42-inch segment and 120 cfs for the 48-inch segment.

The Stormwater Master Plan also identifies two potential stormwater detention basins within the proposed Specific Plan Area: a 40 SF capacity basin east of San Juan Grade Road (draining to the Santa Rita Creek stormwater sub-basin) and a 40 SF capacity basin immediately north of Boronda Road near McKinnon Street (draining to the Markeley Swamp stormwater sub-basin). The plan states that these basins would be added during development of the Specific Plan Area.

Reclamation Ditch Watershed Impact Fee/Draft Nexus Study Summary Report

The Monterey County Water Resources Agency (MCWRA) oversees the development and implementation of water quality, water supply, and flood control projects in Monterey County, including operation and maintenance of the Reclamation Ditch. The Reclamation Ditch is part of a complex drainage system within the lower Salinas Valley. The final draft (August 2006) of the MCWRA's *Reclamation Ditch Watershed Impact Fee/Nexus Study Summary Report* ("Draft Nexus Study"), while not adopted, provides useful background information related to the current state of the Reclamation Ditch system.

The MCWRA has imposed regulations for floodplains in the County. Pertinent regulations include the following:

1. Lands within the FEMA FIRM identified 100-year floodplain (Special Hazards Areas) and areas within 200 feet of a river or with 50 feet of a watercourse are subject to these regulations.
2. No construction is allowed within regulatory floodways or Zones AE.
3. Any encroachment into a regulatory floodway shall not result in any increase of base flood elevations.
4. New construction shall have the lowest floor, including basement, elevated to at least one foot above the base flood elevation.

3.6.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment associated with hydrology and water quality if it will:

- Violate any water quality standards or waste discharge requirements;

- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion, siltation, run-off or flooding on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- Place within a 100-year flood hazard area structures that would impede or redirect flood flows;
- Expose people or structures to significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or
- Result in inundation by seiche, tsunami or mudflow.

IMPACTS AND MITIGATION

Impact 3.6-1: The proposed project has the potential to violate water quality standards or waste discharge requirements during construction (Less than Significant with Mitigation)

According to the United States Environmental Protection Agency, polluted stormwater runoff is a leading cause of impairment to the nearly 40 percent of surveyed U.S. water bodies which do not meet water quality standards. Over land or via storm sewer systems, polluted runoff is discharged, often untreated, directly into local water bodies. Soil erosion is one of the most common sources of polluted stormwater runoff during construction activities. When left uncontrolled, storm water runoff can erode soil and cause sedimentation in waterways, which collectively result in the destruction of fish, wildlife, and aquatic life habitats; a loss in aesthetic value; and threats to public health due to contaminated food, drinking water supplies, and recreational waterways.

Mandated by Congress under the Clean Water Act, the NPDES Stormwater Program is a comprehensive two-phased national program for addressing the non-agricultural sources of stormwater discharges which adversely affect the quality of our nation's waters. The program uses the National Pollutant Discharge Elimination System (NPDES) permitting mechanism to require the implementation of controls designed to prevent harmful pollutants, including soil erosion, from being washed by stormwater runoff into local water bodies. The construction activities for the proposed project would be governed by the General Permit 2009-0009-DWQ (amended by 2010-0014-DWQ & 2012-0006-DWQ), which states:

"…Particular attention must be paid to large, mass graded sites where the potential for soil exposure to the erosive effects of rainfall and wind is great and where there is potential for significant sediment discharge from the site to surface waters. Until permanent vegetation is established, soil cover is the most cost-effective and expeditious method to protect soil particles from detachment and transport by rainfall. Temporary soil stabilization can be the single most important factor in reducing erosion at construction sites. The discharger is required to consider measures such as: covering disturbed areas with mulch, temporary seeding, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation, and permanent seeding. These erosion control measures are only examples of what should be considered and should not preclude new or innovative approaches currently available or being developed. Erosion control BMPs should be the primary means of preventing storm water contamination, and sediment control techniques should be used to capture any soil that becomes eroded…"

General Permit 2009-0009-DWQ (amended by 2010-0014-DWQ & 2012-0006-DWQ) further states that:

"Sediment control BMPs should be the secondary means of preventing storm water contamination. When erosion control techniques are ineffective, sediment control techniques should be used to capture any soil that becomes eroded. The discharger is required to consider perimeter control measures such as: installing silt fences or placing straw wattles below slopes. These sediment control measures are only examples of what should be considered and should not preclude new or innovative approaches currently available or being developed…Inappropriate management of run-on and runoff can result in excessive physical impacts to receiving waters from sediment and increased flows. The discharger is required to manage all run-on and runoff from a Specific Plan Area. Examples include: installing berms and other temporary run-on and runoff diversions…All measures must be periodically inspected, maintained and repaired to ensure that receiving water quality is protected. Frequent inspections coupled with thorough documentation and timely repair is necessary to ensure that all measures are functioning as intended…"

Grading, excavation, removal of vegetation cover, and loading activities associated with construction activities could temporarily increase runoff, erosion, and sedimentation. Construction activities also could result in soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas. To ensure that construction activities are covered under General Permit 2009-0009-DWQ (amended by 2010-0014-DWQ & 2012-0006-DWQ), projects in California must prepare a Stormwater Pollution Prevention Plan (SWPPP) containing Best Management Practices (BMPs) to reduce erosion and sediments to meet water quality standards. Such BMPs may include: temporary erosion control measures such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover. The BMPs and overall SWPPP is reviewed by the Regional Water Quality Control Board as part of the permitting process. The SWPPP, once approved, is kept on site and implemented during construction

activities and must be made available upon request to representatives of the RWQCB and/or the lead agency.

In accordance with the NPDES Stormwater Program, Mitigation Measure 3.6-1 ensures compliance with existing regulatory requirements to prepare a SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the RWQCB has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The RWQCB has stated that these erosion control measures are only examples of what should be considered and should not preclude new or innovative approaches currently available or being developed. The specific controls are subject to the review and approval by the RWQCB and are an existing regulatory requirement. With implementation of Mitigation Measure 3.6-1, the proposed project would have a ***less than significant*** impact relative to this topic.

MITIGATION MEASURES

Mitigation Measure 3.6-1: *Prior to clearing, grading, and disturbances to the ground such as stockpiling, or excavation, the Project proponent shall submit a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) to the RWQCB to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ amended by 2010-0014-DWQ & 2012-0006-DWQ). The SWPPP shall be designed with Best Management Practices (BMPs) that the RWQCB has deemed as effective at reducing erosion, controlling sediment, and managing runoff. These include: covering disturbed areas with mulch, temporary seeding, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation, and permanent seeding. Sediment control BMPs, installing silt fences or placing straw wattles below slopes, installing berms and other temporary run-on and runoff diversions. These BMPs are only examples of what should be considered and should not preclude new or innovative approaches currently available or being developed. Final selection of BMPs will be subject to approval by City of Salinas and the RWQCB. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the RWQCB.*

Impact 3.6-2: The proposed project has the potential to violate water quality standards or waste discharge requirements during operation (Less than Significant with Mitigation)

The long-term operations of the proposed project (all phases) could result in long-term impacts to surface water quality from urban stormwater runoff. The proposed Project would result in new impervious areas associated with roadways, driveways, parking lots, buildings, and landscape areas. Normal activities in these developed areas include the use of various automotive petroleum products (i.e. oil, grease, and fuel), common household hazardous materials, heavy metals, pesticides, herbicides, fertilizers, and sediment. Within urban areas, these pollutants are generally called nonpoint source pollutants. The pollutants pollutant levels vary based on factors such as time between storm events, volume of storm event, type of uses, and density of people.

As shown in Figure 3.11-3 (Section 3.11, Utilities), the proposed drainage infrastructure (conceptual level) includes primary storm drain piping along Natividad Road, East Boronda Road,

San Juan Grade Road, parallel to El Dorado Drive through the WASP area, and an east-west line along new Road C. Altogether, these pipelines total roughly 25,000 feet in length. Five combination detention/water quality basins and water retention basins are planned for the southwest, northwest, central and southeast parts of the area. The open space areas in the specific plan will primarily be utilized for the supplemental storm water detention and retention basins, which will serve the WASP. All parks and open space uses will include site/parcel/lot-based BMPs so that each parcel will, at a minimum, treat all storm water before any leaves the site. Any storm water that cannot be infiltrated on site due to low infiltration rates will be directed to supplemental retention/detention basin.

Following treatment in a water quality treatment/detention basin, storm water which is not retained in a retention basin will discharge to the four existing storm drain inlets: Natividad Road at East Boronda Road, Santa Rita Creek at San Juan Grade Road, Dartmouth Way at East Boronda Road, and McKinnon Street at East Boronda Road.

The project will discharge storm water to Santa Rita Creek and to the existing City storm drain system. The downstream storm drain system will convey these flows and discharge them to Markeley Swamp, Gabilan Creek and Carr Lake and then to the Reclamation Ditch. Listed impairments of these receiving waters (CCRWQCB, 2012) include: nitrate, ammonia, fecal coliforms, E. Coli, turbidity, priority organics, pesticides, copper, and low pH. If runoff from the Specific Plan Area were not treated, then increases in the listed water quality impairments for these receiving waters would be likely.

The NPDES permit granted to the City of Salinas by the Central Coast RWQCB (CCRWQCB, 2012) prohibits discharges which contribute to exceedances of water quality standards and requires that source control BMPs are implemented to minimize discharge of pollutants. The permit defines one Total Maximum Daily Load limitation for these receiving waters: fecal coliform concentrations must not exceed 200 MPN/100 Ml. Untreated stormwater discharges have the potential to contribute fecal coliforms to receiving waters, due to the presence animal wastes in impervious and landscaped areas.

The City of Salinas Stormwater Standards for New and Redevelopment Projects (City of Salinas, 2013) require the following water quality practices:

I. Pollution source control for all impervious areas using BMPs; and
II. Retention of all rainfall events up to 95th percentile 24-hour rainfall event.

Stormwater discharges from the Specific Plan Area, if not treated, would violate the City of Salinas NPDES permit as well as the City of Salinas stormwater development standards, and would likely contribute to violations of the receiving water TMDL for fecal coliforms. Water quality treatment will be provided through the combination of both LID (source control) and BMP (treatment control) methods and facilities. The project has incorporated space for bio-swales along many of the proposed roads. Local surface runoff will either sheet flow to or be collected and conveyed through the bio-swales. In addition to the LID features, runoff from the Specific Plan Area will be treated by the neighborhood detention, water quality, and retention basins as well as water

quality basins located within the parks throughout the West Area. The neighborhood water quality basins are treatment control BMPs designed to collect runoff from adjacent overland surface flow and concentrated pipe discharge, treat runoff by attenuating flows to allow settlement of sediments, and then discharge back to the downstream storm drain system.

With implementation of Mitigation Measures 3.6-2 through 3.6-4, the proposed project would have a ***less than significant*** impact relative to this topic.

MITIGATION MEASURES

Mitigation Measure 3.6-2: *Prior to the approval of Improvement Plans, the project applicant shall submit to the Salinas Public Works Department detailed plans and calculations for water quality best management practices (BMPs) and water quality detention/retention basins designed to meet the prevailing regulatory requirements and to reduce contaminant loadings to receiving waters to the maximum extent practicable.*

The Improvement Plans shall be consistent with the City's NPDES permit requirements. The NPDES permit granted to the City of Salinas by the Central Coast RWQCB (CCRWQCB, 2012) requires the following:

I. *Erosion and Sediment Control BMPs – Erosion control and sediment control BMPs shall be designed, installed, and maintained to reduce the discharge of pollutants from construction sites to the maximum extent practical (MEP) and protect water quality;*
II. *Erosion and sediment from slopes and channels shall be controlled by implementing an effective combination of erosion control (source control) and other sediment control BMPs; and*
III. *Soil Stabilization – Stabilization of disturbed areas shall, at a minimum, be initiated immediately whenever any clearing, grading, excavating, or other earth disturbing activities have permanently ceased.*

Additionally, the Improvement Plans shall be consistent with the requirements of the City's Stormwater Standards for New and Redevelopment Projects. The City of Salinas Stormwater Standards for New and Redevelopment Projects (City of Salinas, 2013) require the following practices:

I. *Limit disturbance of creeks and natural drainage features and provide setbacks according to Permit Provision L.1.d;*
II. *Minimize compaction of highly permeable soils; and*
III. *Limit clearing and grading of native vegetation to the minimum needed to build the project and provide fire protection.*

Mitigation Measure 3.6-3: *Prior to the approval of Improvement Plans, the project applicant shall submit to the Salinas Public Works Department detailed plans and calculations for water quality best management practices (BMPs) and water quality detention basins designed to prevent to the maximum extent practicable the creation of new sources of polluted runoff. The detailed plans shall be subject to review and approval by the Salinas Public Works Department.*

Mitigation Measure 3.6-4: *Prior to the approval of Improvement Plans, the project applicant shall submit to the Salinas Public Works Department detailed plans and calculations for detention/ retention basins and flow reducing BMPs designed to meet regulatory requirements and to reduce peak flows during storm events below peak flows under pre-project conditions. The detailed plans shall be subject to review and approval by the Salinas Public Works Department.*

Impact 3.6-3: The proposed project has the potential to substantially deplete groundwater supplies or interfere substantially with groundwater recharge (Less than Significant with Mitigation)

The quantity of ground water in the Salinas Valley has been declining for decades, as evidenced by the substantial lowering of water levels in the aquifers. Impacts on groundwater in the Salinas area are an important consideration in any development plan.

The proposed project would result in new impervious surfaces and could reduce rainwater infiltration and groundwater recharge in those areas. Infiltration rates vary depending on the overlying soil types. In general, sandy soils have higher infiltration rates and can contribute to significant amounts of ground water recharge; clay soils tend to have lower percolation potential; and impervious surfaces such as pavement significantly reduce infiltration capacity and increase surface water runoff.

The proposed development, including water quality BMPs, detention basins, and retention basins, is designed to minimize or eliminate increases in runoff from these new impervious surfaces entering surface water courses and storm drains. The stormwater runoff calculations completed as part of the Hydrology and Water Quality Technical Study indicate that peak runoff and total volume of runoff will be minimized by the proposed development storm drainage design which retains water to the maximum extent possible. Consequently, infiltration into the ground water aquifers will be maximized to the extent possible through the storm drainage design.

The project would provide three new wells to be constructed as development progresses. The first well would likely be operational at the time initial development occurs. The assumption for the design capacity of the three new Specific Plan Area wells is 1,200 gpm each. The first well that would be functioning in 2020 would add 1,200 gpm capacity, or 1,937 AFY. Thus, in 2020, the total design capacity of wells serving the City of Salinas including the Specific Plan Area would be 52,592 AFY (44,843 AFY + 5,812 AFY + 1,937 AFY = 52,592 AFY).

In addition to constructing new wells, the project will modify the movement of water across the land surface and the infiltration of rain water into the groundwater system. The aquifers underlying the plan area are impacted by nitrate contamination. Groundwater in the project vicinity is subject to increasing salinity due to seawater intrusion from Monterey Bay. Both of these impairments affect use of the groundwater for potable water supplies and use for irrigation. The project, if no means were provided to preserve infiltration of rainwater, would likely reduce net infiltration of rain water and runoff into the groundwater system and reduce the diluting effect of this fresh water supply. The net impact would be a further increase in salinity intrusion and build-up of contaminants in the groundwater in the Salinas basin. However, the project without

mitigation would also likely decrease the amount of nitrates entering the groundwater from the plan area, due to elimination of agricultural fertilizer application. Surface water quality detention basins and BMPs also have the potential to add to groundwater contamination levels if they are not properly designed and sited.

The BMPs proposed as part of the development plan are designed to infiltrate as much storm water runoff as practicable into the ground. The predicted impact of the development, including retention basins and BMPs, is to decrease the volume of runoff from the plan area during large rainfall events and eliminate discharges completely for storms up to 0.98 inches in 24 hours. A portion of the retained runoff (and likely the vast majority given the sandy soils) will infiltrate into the ground, helping to replenish the aquifers. The proposed BMPs are designed to trap contaminants and to beneficially make use of nutrients in the vegetated swales and planted areas. In addition, application rates of fertilizers on urbanized areas is less than that typically used in intensive agriculture. The aggregate effect of the proposed development will, therefore, be to decrease the loading of nutrients (in particular, nitrates) into the ground water.

The proposed project, without mitigating features, would reduce infiltration of rainwater and runoff into the local groundwater system due to the increase in impermeable area. The total annual rainfall depth in an average year is approximately 16 inches and the project surface area is approximately 797 acres, producing an annual rainfall volume of approximately 1,060 AF. Nearly all of this area is currently in agriculture, while the proposed project could convert as much as 60 percent of the area to impervious surfaces, resulting in a reduction in groundwater recharge in the range of 400 to 600 AF. However, the proposed stormwater BMPs and retention basins are designed to reduce runoff below that which occurs currently during storm events and, therefore, increase groundwater recharge from the plan area to the extent possible. Implementation of the following mitigation would ensure that impacts related to groundwater recharge would be ***less than significant***.

MITIGATION MEASURES

Mitigation Measure 3.6-5: *Prior to the approval of Improvement Plans, the project applicant shall design, site, and install stormwater retention/infiltration basins and infiltration promoting BMPs that are similar to published plans and sufficient to assure that there is no reduction in groundwater recharge. The stormwater plan shall be reflected on the Improvement Plans, subject to review and approval by the Salinas Public Works Department.*

Mitigation Measure 3.6-6: *Prior to the approval of Improvement Plans, the project applicant shall design, site, and install stormwater detention basins and BMPs in accordance with City of Salinas stormwater development standards. Maintenance procedures and funding mechanisms shall be established for those facilities to assure adequate performance in treating the water and controlling infiltration into the groundwater. The Improvement Plans shall be subject to review and approval by the Salinas Public Works Department.*

Impact 3.6-4: The proposed project has the potential to alter the existing drainage pattern in a manner which would result in substantial erosion, siltation, flooding, or polluted runoff (Less than Significant)

The proposed development, including water quality BMPs, detention basins, and retention basins, is designed to minimize or eliminate increases in runoff entering surface water courses and storm drains. The calculations completed as part of the Hydrology and Water Quality Technical Study indicate that peak runoff and total volume of runoff will be minimized by the proposed development storm drainage design which retains water to the maximum extent possible.

The proposed project will not alter drainage patterns in a manner which will cause flooding, erosion, or siltation. Surface runoff from the area will be managed via detention/retention basins and flow reducing BMPs to prevent local flooding within the site. These features will also reduce peak flows from the plan area to receiving creeks and storm drains to amounts less than such flows under existing conditions. Sediment in the stormwater flows will be trapped in detention ponds designed to prevent siltation. Flooding, erosion, or siltation is not anticipated by the proposed project given the storm drain design and best management practices that will be implemented.

With the implementation of mitigation measures already presented above, and with the design and construction of the improvements included in the proposed storm drainage system, the proposed project would have a ***less than significant*** impact relative to this topic.

Impact 3.6-5: The proposed project has the potential to otherwise substantially degrade water quality (Less than Significant)

Water Quality Impacts from Discharges to 303(d) Listed Water Bodies: Section 303(d) of the federal Clean Water Act (CWA) requires States to identify waters that do not meet water quality standards or objectives and thus, are considered "impaired." Once listed, Section 303(d) mandates prioritization and development of a Total Maximum Daily Load (TMDL). The TMDL is a tool that establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the States to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

Important water quality concerns for the Carr Lake, Santa Rita Creek, and Gabilan Creek receiving waters include: turbidity, nutrients, and fecal coliforms. Urbanized areas also produce contaminants such as heavy metals, oils and greases, pesticides, nutrients from landscape fertilizers, and household chemicals. The water quality BMPs and water quality detention basins which are included in the proposed development are designed to capture and retain the urban-associated contaminants as well as reduce turbidity and nutrients which may be mobilized in the developed areas. The water quality detention basins will also trap suspended solids and nutrients which enter the plan area from the up slope properties which will continue to be farmed or used for livestock grazing. The proposed development is anticipated to reduce loadings of contaminants, nutrients, and turbidity to the receiving waters relative to existing conditions.

In accordance with the NPDES Stormwater Program, Mitigation Measure 3.6-1 above requires an approved SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the RWQCB has deemed effective in controlling erosion, sedimentation, runoff during construction activities. Such BMPs may include: temporary erosion control measures such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover. The BMPs and overall SWPPP is reviewed by the RWQCB as part of the permitting process. The SWPPP, once approved, is kept on site and implemented during construction activities and must be made available upon request to representatives of the RWQCB and/or the lead agency. The RWQCB has stated that these erosion control measures are only examples of what should be considered and should not preclude new or innovative approaches currently available or being developed. The specific controls are subject to the review and approval by the RWQCB.

The use of BMPs are intended to treat runoff close to the source during the construction and long term operational phase of the project to reduce stormwater quality impacts. The mitigation measure listed below complies with existing regulatory requirements. Implementation of proposed project would have a ***less-than-significant*** impact relative to this topic.

MITIGATION MEASURES

Implement **Mitigation Measure 3.6-1**.

Impact 3.6-6: Place housing or structures that would impede/redirect flows within a 100-year, or 200-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)

As shown on Figure 3.6-3, no portion of the Specific Plan Area is located within a 100-year flood hazard zone. A small flood hazard area is identified as Zone X and is located in a local depression adjacent to San Juan Grade Road where Santa Rita Creek flows next to the road, across from the Specific Plan Area. Flood conditions in Zone X ("Other Flooded Areas") are limited to less than one-foot depth during the 100-year event and/or are subject to flooding between the 100- and 500-year events. The extent of flooding is naturally limited by existing topography. Lands designated as Zone X are outside of the Special Flood Hazard Areas. Changes to land surfaces in these areas do not trigger map revisions and no flood insurance requirements are imposed on structures in these areas.

No other parts of the Specific Plan Area are designated as flood prone, and there are no impacts to regulatory floodways or Special Flood Hazard Areas (Zone A or AE) as defined by FEMA. Provided that the storm drain system and detention/retention facilities to be installed as part of the proposed development are adequately sized and properly installed and maintained, additional flooding will not be induced by the proposed project. As a result, the proposed project would have a ***less-than-significant*** impact relative to this topic.

Impact 3.6-7: The proposed project has the potential to expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, seiche, tsunami, or mudflow (Less than Significant)

A tsunami is a sea wave caused by a submarine earthquake, landslide, or volcanic eruption. Tsunami can cause catastrophic damage to shallow or exposed shorelines. The Specific Plan Area is approximately 9 miles from the coast, which is sufficiently distant to preclude effects from a tsunami. Additionally, tsunami inundation maps for the area show no risk of tsunami inundation for the Specific Plan Area.

Seiches are changes or oscillations of water levels within a confined water body. Seiches are caused by fluctuation in the atmosphere, tidal currents or earthquakes. The effect of this phenomenon is a standing wave that would occur when influences by the external causes. The Specific Plan Area is not adjacent to any lakes that pose significant a risk from a seiche event.

A mudflow is a type of mass wasting or landslide, where earth and surface materials are rapidly transported downhill under the force of gravity. Mudflow events are caused by a combination of factors, including soil type, soil profile, precipitation, and slope. Mudflow may be triggered by heavy rainfall that the soil is not able to sufficiently drain or absorb. As a result of this super-saturation, soil and rock materials become unstable and eventually slide away from their existing location. Soils most susceptible to mudflow are saturated, loose, non-plastic, uniformly graded, and fine-grained sand deposits. The Specific Plan Area is relatively flat making the potential of on-site mudflows low. Additionally, no information regarding mud flow potential in the Specific Plan Area was found. The contributing watershed for the area is very small and the Specific Plan Area is not proximate to conditions (e.g., steep slopes, unstable soils, narrow canyons subject to flash flooding) which could produce mudflows. The site is also elevated sufficiently above sea level to preclude any risk of inundation due to sea level rise.

Portions of the Salinas Valley have been identified as subject to flood risk due to failure of the San Antonio or Nacimiento Dams, which are located in the upper reaches of the Salinas River watershed. As shown in Figure 3.6-4, the elevation of the Specific Plan Area and its distance from the Salinas River channel make it extremely unlikely that failure of either dam or failure of any of the levees located along the Salinas River channel would cause flooding of the plan area. No levees or dams exist in the vicinity of the Specific Plan Area.

The proposed project would not result in the exposure of people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, seiche, tsunami, or mudflow. This impact is considered ***less than significant***.

Impact 3.6-8: Cumulative increases in peak stormwater runoff from the plan area (Less than Significant and Less than Cumulatively Considerable)

Implementation of the WASP would increase the amount of impervious surfaces in the Specific Plan Area, which could increase peak stormwater runoff rates and volumes on and downstream of the Specific Plan Area. However, the WASP includes an extensive system of on-site stormwater

collection, treatment and retention facilities to accommodate the increased stormwater flows that would originate in the Specific Plan Area.

Surface runoff from the area will be managed via detention/retention basins and flow reducing Best Management Practices (BMPs) to prevent local flooding within the site. These features will also reduce peak flows from the Specific Plan Area to receiving creeks and storm drains to amounts less than such flows under existing conditions.

The proposed development, including water quality BMPs, detention basins, and retention basins, is designed to minimize or eliminate increases in runoff from these new impervious surfaces entering surface water courses and storm drains. The stormwater runoff calculations completed as part of the Hydrology and Water Quality Technical Study indicate that peak runoff and total volume of runoff will be minimized by the proposed development storm drainage design which retains water to the maximum extent possible.

With the design and construction of flood control improvements, the WASP would not increase peak stormwater runoff. Implementation of the proposed project would have a less than significant cumulative impact relative to this environmental topic. As such, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to stormwater runoff.

Impact 3.6-9: Cumulative impacts related to degradation of water quality (Less than Significant and Less than Cumulatively Considerable)

The project will discharge storm water to Santa Rita Creek and to the existing City storm drain system. As shown in Figure 3.11-3 (within Section 3.11: Utilities), the proposed drainage infrastructure (conceptual level) includes primary storm drain piping along Natividad Road, East Boronda Road, San Juan Grade Road, parallel to El Dorado Drive through the WASP area, and an east-west line along new Road C. Altogether, these pipelines total roughly 25,000 feet in length. Five combination detention/water quality basins and water retention basins are planned for the southwest, northwest, central and southeast parts of the area. Following treatment in a water quality treatment/detention basin, storm water which is not retained in a retention basin will discharge to the four existing storm drain inlets: Natividad Road at East Boronda Road, Santa Rita Creek at San Juan Grade Road, Dartmouth Way at East Boronda Road, and McKinnon Street at East Boronda Road.

Construction of the WASP would contribute to a cumulative increase in urban pollutant loading, which could adversely affect water quality. Cumulative development in the Salinas area, including within the Plan Area, would also result in increased impervious surfaces that could increase the rate and amount of runoff, thereby potentially adversely affecting existing surface water quality through increased erosion and sedimentation. The primary sources of water pollution include: runoff from roadways and parking lots; runoff from landscaping areas; non-stormwater connections to the drainage system; accidental spills; and illegal dumping. Runoff from roadway and parking lots could contain oil, grease, and heavy metals; additionally, runoff from landscaped areas could contain elevated concentrations of nutrients, fertilizers, and pesticides.

The WASP will be required to comply with Mitigation Measure 3.6-1 which requires the development and approval of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP will include BMPs to regulate stormwater quality for the Specific Plan Area. In accordance with the National Pollution Discharge Elimination System (NPDES) Stormwater Program, Mitigation Measure 3.6-1 ensures compliance with existing regulatory requirements to prepare a SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the Regional Water Quality Control Board (RWQCB), Central Coast Region, has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The RWQCB has stated that these erosion control measures are only examples of what should be considered and should not preclude new or innovative approaches currently available or being developed. The specific controls are subject to the review and approval by the RWQCB and are an existing regulatory requirement.

While there are no assurances that other projects in the City/County would incorporate the same degree or methods of treatment as the WASP, several of the projects within the City of Salinas would phase out existing agricultural runoff discharges from their respective sites and, similar to the WASP, could provide some level of water quality improvement. Also, each project in the City that would discharge stormwater runoff would be required to comply with NPDES discharge permits from the RWQCB, which adjusts requirements on a case-by-case basis to avoid significant degradation of water quality. Therefore, while a greater quantity of urban runoff may result from implementation of other future projects, because of an increase in impervious surfaces, the associated surface water quality impacts would be expected to be less than significant because of improved or similar quality of runoff compared to existing conditions.

Compliance with City and County water quality protection regulations, approval from the RWQCB, and implementation of Mitigation Measure 3.6-1 would ensure that the WASP minimizes impacts to surface water quality. Implementation of the proposed project would have a less than significant cumulative impact relative to this environmental topic. As such, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to the potential for degradation of water quality.

Impact 3.6-10: Cumulative impacts related to degradation of groundwater supply or recharge (Less than Significant and Less than Cumulatively Considerable)

The WASP would result in new impervious surfaces and could reduce rainwater infiltration and groundwater recharge in those areas. Infiltration rates vary depending on the overlying soil types. In general, sandy soils have higher infiltration rates and can contribute to significant amounts of ground water recharge; clay soils tend to have lower percolation potential; and impervious surfaces such as pavement significantly reduce infiltration capacity and increase surface water runoff.

The proposed development, including water quality BMPs, detention basins, and retention basins, is designed to minimize or eliminate increases in runoff from these new impervious surfaces entering surface water courses and storm drains. The stormwater runoff calculations completed as

part of the Hydrology and Water Quality Technical Study indicate that peak runoff and total volume of runoff will be minimized by the proposed development storm drainage design which retains water to the maximum extent possible. Consequently, infiltration into the ground water aquifers will be maximized to the extent possible through the storm drainage design.

The project would provide three new wells to be constructed as development progresses. The first well would likely be operational at the time initial development occurs. The assumption for the design capacity of the three new Specific Plan area wells is 1,200 gpm each. The first well that would be functioning in 2020 would add 1,200 gpm capacity, or 1,937 AFY. Thus, in 2020, the total design capacity of wells serving the City of Salinas including the Specific Plan area would be 52,592 AFY (44,843 AFY + 5,812 AFY + 1,937 AFY = 52,592 AFY).

In addition to constructing new wells, the project will modify the movement of water across the land surface and the infiltration of rain water into the groundwater system. The aquifers underlying the Plan Area are impacted by nitrate contamination. Groundwater in the project vicinity is subject to increasing salinity due to seawater intrusion from Monterey Bay. Both of these impairments affect use of the groundwater for potable water supplies and use for irrigation. The proposed project, if no means were provided to preserve infiltration of rainwater, would likely reduce net infiltration of rain water and runoff into the groundwater system and reduce the diluting effect of this fresh water supply. The net impact would be a further increase in salinity intrusion and build-up of contaminants in the groundwater in the Salinas basin. However, the proposed project without mitigation would also likely decrease the amount of nitrates entering the groundwater from the Plan Area, due to elimination of agricultural fertilizer application. Surface water quality detention basins and BMPs also have the potential to add to groundwater contamination levels if they are not properly designed and sited.

The proposed project, without mitigating features, would reduce infiltration of rainwater and runoff into the local groundwater system due to the increase in impermeable area. The total annual rainfall depth in an average year is approximately 16 inches and the project surface area is approximately 797 acres, producing an annual rainfall volume of approximately 1,060 AF. Nearly all of this area is currently in agriculture, while the proposed project could convert as much as 60 percent of the area to impervious surfaces, resulting in a reduction in groundwater recharge in the range of 400 to 600 AF.

With implementation of Mitigation Measure 3.6-5 and 3.6-6, the WASP would not cause the substantial depletion of groundwater supplies or interfere substantially with groundwater recharge. Implementation of the proposed project would have a less than significant cumulative impact relative to this environmental topic. As such, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to the potential for degradation of groundwater supply or recharge.

Impact 3.6-11: Cumulative impacts related to flooding (Less than Significant and Less than Cumulatively Considerable)

As shown on Figure 3.6-3, predicted flood conditions in the vicinity of the Specific Plan Area are shown on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM)

panels 06053C0207G, 06053C0209G, and 06053C0226G. No portion of the Specific Plan Area is located within a 100-year flood hazard zone. A small flood hazard area is identified as Zone X and is located in a local depression adjacent to San Juan Grade Road where Santa Rita Creek flows next to the road, across from the Specific Plan Area. Flood conditions in Zone X ("Other Flooded Areas") are limited to less than one-foot depth during the 100-year event and/or are subject to flooding between the 100- and 500-year events. The extent of flooding is naturally limited by existing topography. Lands designated as Zone X are outside of the Special Flood Hazard Areas. Changes to land surfaces in these areas do not trigger map revisions and no flood insurance requirements are imposed on structures in these areas.

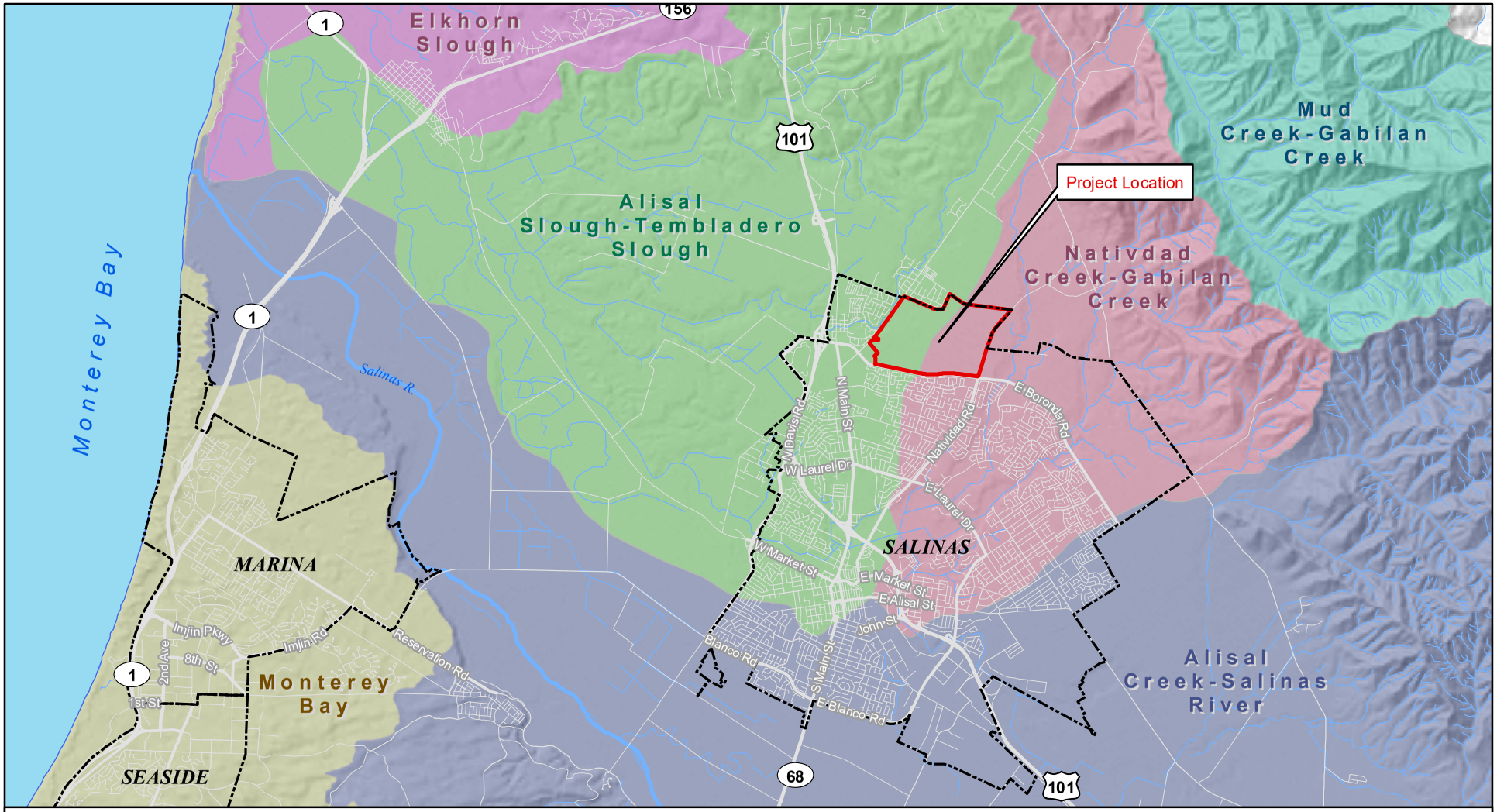
No other parts of the Specific Plan Area are designated as flood prone, and there are no impacts to regulatory floodways or Special Flood Hazard Areas (Zone A or AE) as defined by FEMA. Provided that the storm drain system and detention/retention facilities to be installed as part of the proposed development are adequately sized and properly installed and maintained, additional flooding will not be induced by the proposed project. Therefore, the WASP is not at risk of the 100-year flood.

However, future projects in the area could result in additional discharges of stormwater during storm events which, in theory, could lead to an incremental increase in peak stormwater runoff and potential increases in downstream flood elevations. However, the Monterey County Water Resources Agency (MCWRA) oversees the development and implementation of water quality, water supply, and flood control projects in Monterey County, including operation and maintenance of the Reclamation Ditch. The Reclamation Ditch is part of a complex drainage system within the lower Salinas Valley.

The MCWRA has imposed regulations for floodplains in the County. Pertinent regulations include the following:

1. Lands within the FEMA FIRM identified 100-year floodplain (Special Hazards Areas) and areas within 200 feet of a river or with 50 feet of a watercourse are subject to these regulations.
2. No construction is allowed within regulatory floodways or Zones AE.
3. Any encroachment into a regulatory floodway shall not result in any increase of base flood elevations.
4. New construction shall have the lowest floor, including basement, elevated to at least one foot above the base flood elevation.

Future development in the area must be sited and designed in accordance with the aforementioned MCWRA regulations. The WASP would not result in a cumulatively considerable contribution to any significant cumulative impacts as future projects would also be subject to the same regulatory limitations. Implementation of the proposed project would have a less than significant cumulative impact relative to this environmental topic. As such, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to the potential for impacts related to flooding.



CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.6-1. Watershed Map

HUC-12

- Alisal Creek-Salinas River
- Alisal Slough-Tembladero Slough
- Elkhorn Slough
- Monterey Bay
- Mud Creek-Gabilan Creek
- Nativdad Creek-Gabilan Creek

N

0 0.5 1

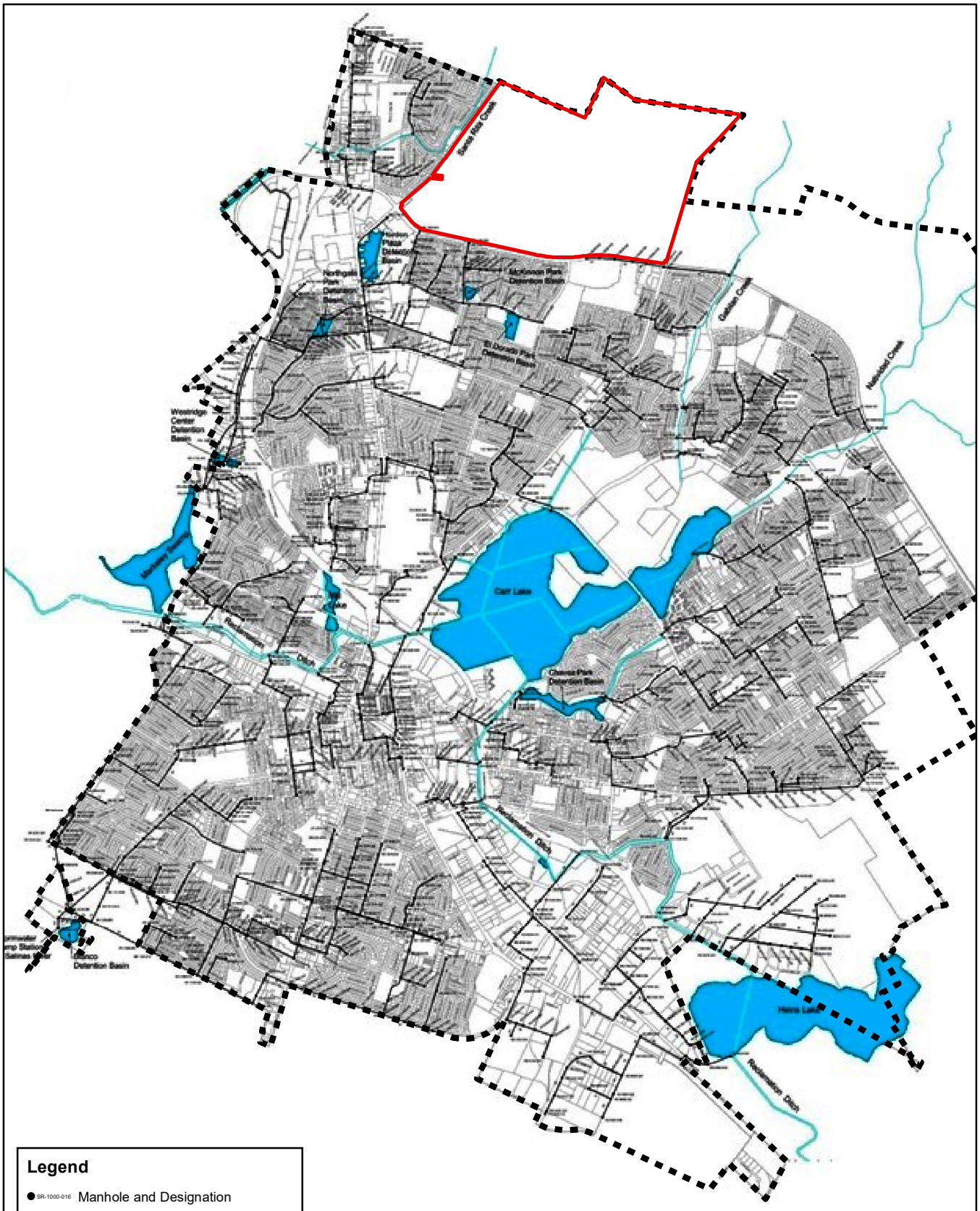
Miles

1:120,000

Sources: USGS National Watershed Boundary Dataset; USGS National Hydrography Dataset; Monterey County GIS. Map date: April 25, 2016. Revised November 21, 2016.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.



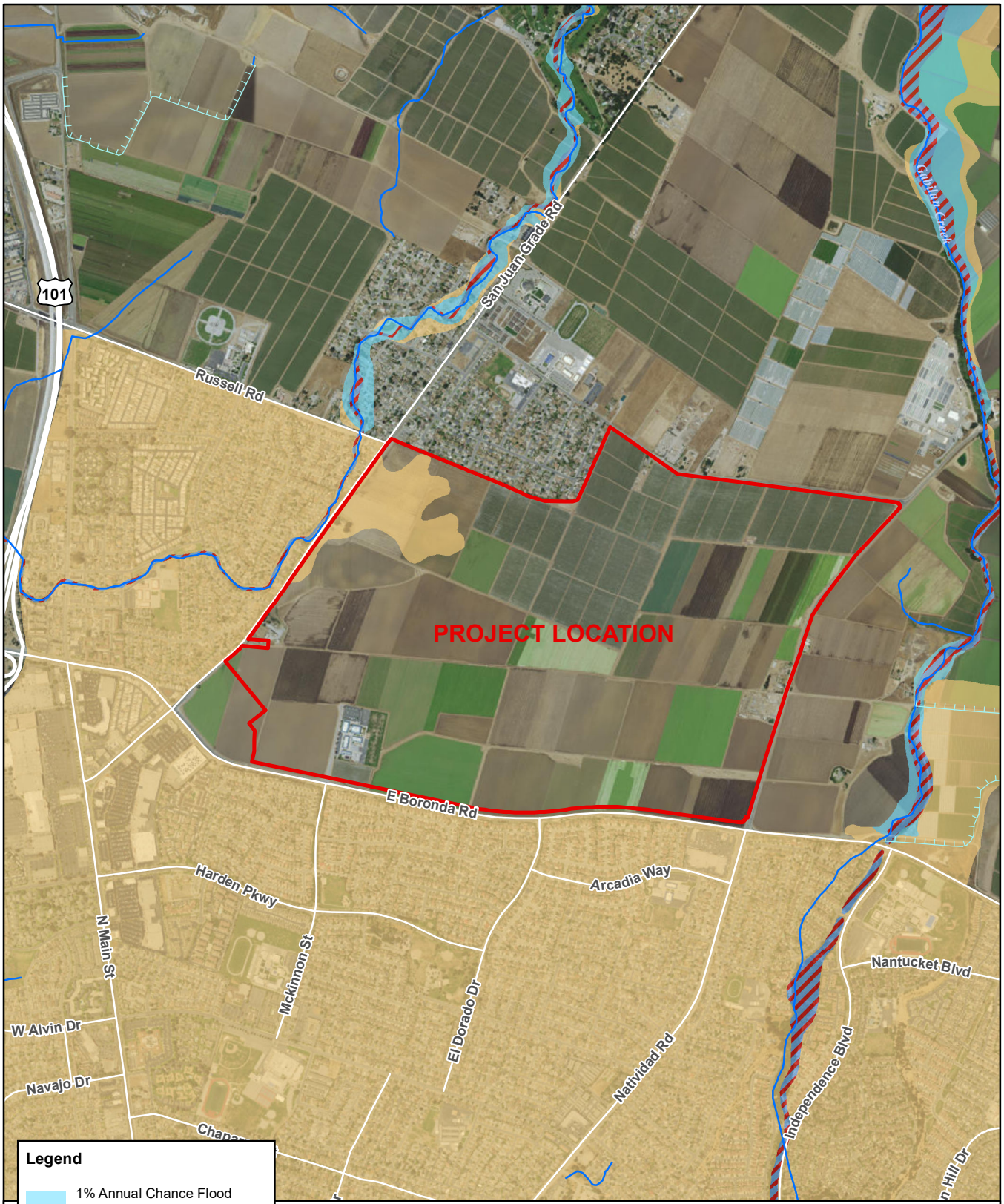
CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.6-2. Storm Drainage

Source: City of Salinas Storm Water Master Plan, 2004.
Map date: November 29, 2016.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.



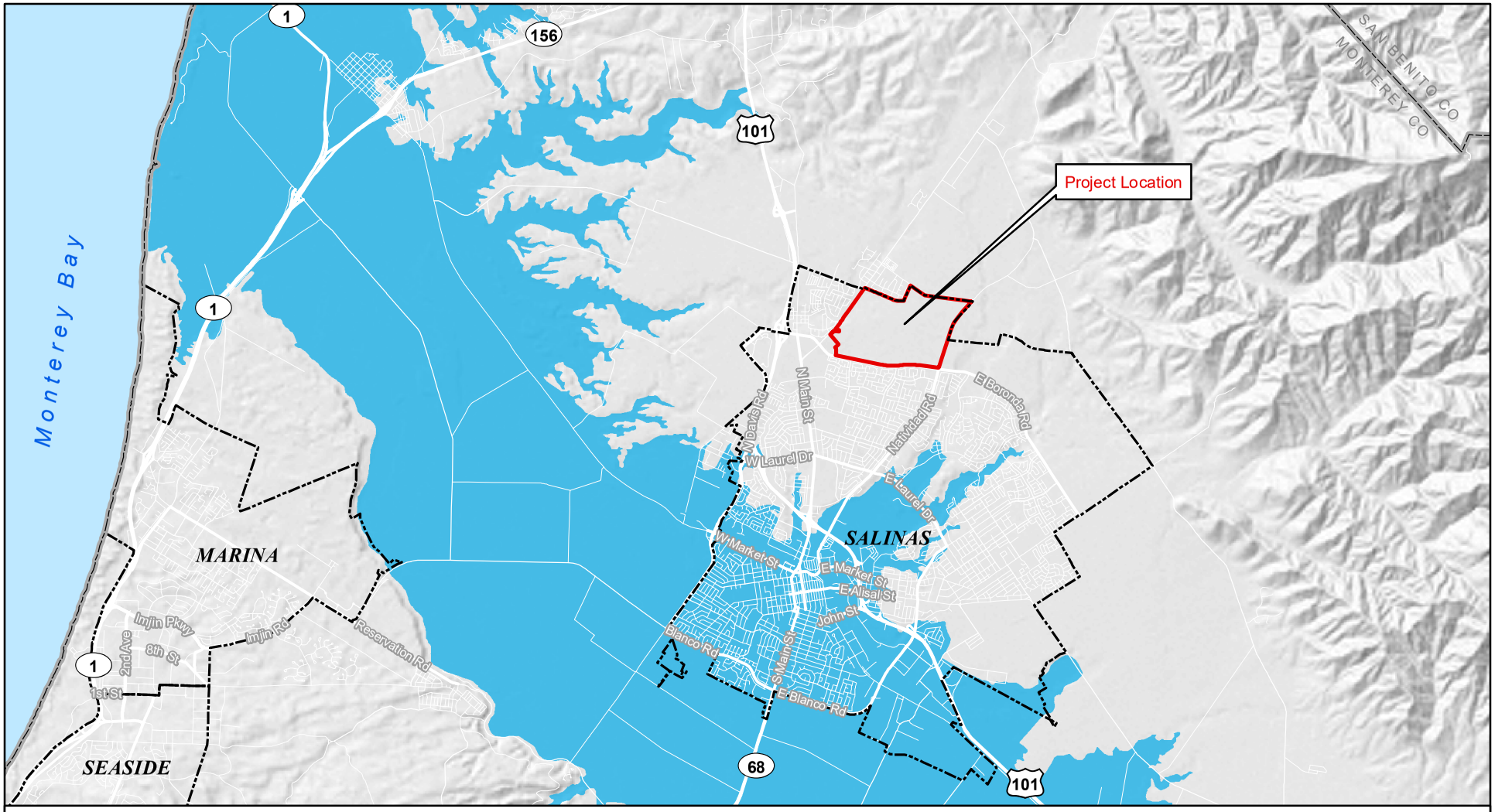
CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.6-3. FEMA Flood Map

Sources: FEMA National Flood Hazard Layer, Panels 06053C0207G, 06053C0226G, 06053C0209G; 06053C0228G, eff 4/2/2009; Monterey County; USGS NHD. Map date: April 25, 2016. Revised November 29, 2016.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.



CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.6-4. Dam Inundation Areas

Nacimiento Dam and San Antonio Dam Inundation Areas

N

0 0.5 1

Miles

1:120,000

Sources: Cal EMA Dam Inundation Areas; Monterey County GIS.
Map date: April 25, 2016. Revised November 29, 2016.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.

This section provides a general description of the existing noise sources in the project vicinity, a discussion of the regulatory setting, and identifies potential noise impacts associated with the proposed project. Project impacts are evaluated relative to applicable noise level criteria and to the existing ambient noise environment. Mitigation measures have been identified for significant noise-related impacts. No comments related to noise were received during the public review period for the Notice of Preparation.

3.7.1 ENVIRONMENTAL SETTING

KEY TERMS

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given area consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of noise.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, defined as ten times the logarithm of the ratio of the sound pressure squared over the reference pressure squared.
CNEL	Community noise equivalent level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 to 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic acoustic signal, expressed in cycles per second or Hertz.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
L_{dn}	Day/Night Average Sound Level. Like CNEL but with no evening weighting.
L_{eq}	Equivalent or energy-averaged sound level.
L_{max}	The highest root-mean-square (RMS) sound level measured over a given period.
$L_{(n)}$	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L_{50} is the sound level exceeded 50 percent of the time during the one hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
Noise	Unwanted sound.
SEL	Sound exposure levels. A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy into a one-second event.

FUNDAMENTALS OF ACOUSTICS

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound, and twice as loud as a 60-dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn}, and shows very good correlation with community response to noise.

The day/night average level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment. CNEL is like L_{dn},

but includes a +5-dB penalty for evening noise. Table 3.7-1 lists several examples of the noise levels associated with common situations.

TABLE 3.7-1: TYPICAL NOISE LEVELS

COMMON OUTDOOR ACTIVITIES	*NOISE LEVEL (DBA)*	*COMMON INDOOR ACTIVITIES*
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft)	--100--	
Gas Lawn Mower at 1 m (3 ft)	--90--	
Diesel Truck at 15 m (50 ft), at 80 km/hr (50 mph)	--80--	Food Blender at 1 m (3 ft) Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft)	--70--	Vacuum Cleaner at 3 m (10 ft)
Commercial Area Heavy Traffic at 90 m (300 ft)	--60--	Normal Speech at 1 m (3 ft)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

SOURCE: CALTRANS, TECHNICAL NOISE SUPPLEMENT, TRAFFIC NOISE ANALYSIS PROTOCOL. SEPTEMBER 2013.

EFFECTS OF NOISE ON PEOPLE

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction;
- Interference with activities such as speech, sleep, and learning; and
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it. The following relationships occur regarding increases in A-weighted noise level:

- Except in carefully controlled laboratory experiments, a 1 dBA change cannot be perceived;
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- A change in level of at least 5-dBA is required before any noticeable change in human response would be expected; and

- A 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6 dB per doubling of distance from the source, depending on environmental conditions (i.e., atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

EXISTING NOISE LEVELS

Existing and Surrounding Land Uses

North: The Bolsa Knolls residential area is located to the north of the Plan Area on the northeastern corner of the intersection of Russell Road and San Juan Grade Road. Scattered residences and other non-residential uses are also located along Rogge Road to the north. Further to the north is a mix of agricultural land, rural residences, and the Club at Crazy Horse Ranch formerly known as the Salinas Golf and Country Club. These land uses are all located in the unincorporated area of Monterey County.

East: Land to the east of the Plan Area is currently used primarily for agricultural production and is zoned New Urbanism Interim (NI) with a Specific Plan Overlay District. This area is in the North of Boronda Future Growth Area (FGA) and a Specific Plan (referred to as the Central Area Specific Plan [CASP]) has been submitted to the City and is currently being processed for this area. The CASP proposes a mix of urban land uses, like those proposed for the West Area Specific Plan (WASP).

South: Across Boronda Road directly to the south is the Harden Ranch Specific Plan. The portion of the Harden Ranch Specific Plan abutting the Plan Area is primarily residential. Most of the residences are of the type associated with low density residential uses, mainly single-family detached homes. However, some medium density and high density (apartment) units are in this area as well. These residential uses are zoned R-L-5.5 (Residential Low Density), R-M-2.9 (Residential Medium Density) and R-H-1.8 (Residential High Density). Single-family detached homes (zoned R-L 5.5) are also located to the southeast of the Plan Area (east of Natividad Road). Other land uses in the Harden Ranch Specific Plan Area include a commercial shopping center (Shaker Square) located at the southwest corner of Natividad Road and Boronda Road (zoned Retail Commercial-RC) and the New Republic Elementary School (within the Santa Rita Union School District) (zoned Public/Semipublic-PS). Extensive commercial development is located generally west and southwest of the Plan Area, along both North Main Street and U.S. 101. This is the location of some of the major retail centers in Salinas, including the Northridge Shopping Center, Santa Rita Shopping Center, and Harden Ranch Plaza. These areas are zoned Commercial Retail (RC).

West: The area directly to the west of the Plan Area contains residential uses consisting of low, medium and high density residential uses. These uses are zoned R-L-5.5 (Residential Low Density), R-M-2.9 (Residential Medium Density) and R-H-2.1 (Residential High Density). Also, located farther to the west is Santa Rita Elementary School (within the Santa Rita Union School District) which is zoned PS.

The City and County General Plan land use designations for the above areas are illustrated on Figure 2-3.

Existing Ambient Noise Levels

To quantify the existing ambient noise environment in the project vicinity, short-term and continuous (24-hour) noise level measurements were conducted on the Plan Area on January 19th and 20th, 2016. The noise measurement locations are shown on Figure 3.7-1. The noise level measurement survey results are provided in Table 3.7-2. Appendix A of Appendix H shows the complete results of the noise monitoring survey.

The sound level meters were programmed to collect hourly noise level intervals at each site during the survey. The maximum value (L_{max}) represents the highest noise level measured during an interval. The average value (L_{eq}) represents the energy average of all the noise measured during an interval. The median value (L_{50}) represents the sound level exceeded 50 percent of the time during an interval.

TABLE 3.7-2: SUMMARY OF EXISTING BACKGROUND NOISE MEASUREMENT DATA

SITE	LOCATION	DATE/TIME	L_{DN}	AVERAGE MEASURED HOURLY NOISE LEVELS, dB					
				DAYTIME (7AM-10PM)			NIGHTTIME (10PM-7AM)		
				L_{EQ}	L_{50}	L_{MAX}	L_{EQ}	L_{50}	L_{MAX}
Continuous (24-hour) Noise Level Measurements									
A	150 ft. from centerline of San Juan Grade Road	1/19/16-1/20/16 24-hour	58	57	55	71	49	44	64
Short-Term Noise Level Measurements									
1	Southwest corner of site	1/19/16 – 3:40 p.m.	N/A	65	61	71	Traffic on Boronda is primary noise source		
		1/20/16 – 7:15 a.m.	N/A	65	61	72			
		1/20/16 12:30 p.m.	N/A	62	59	72			
2	North/central portion of site	1/19/16 – 4:25 p.m.	N/A	56	52	70	Distant traffic is primary noise source		
		1/20/16 – 7:40 a.m.	N/A	57	53	71			
		1/20/16 – 1:05 p.m.	N/A	56	52	69			

NOTE: N/A = NOT APPLICABLE.
SOURCE: J.C. BRENNAN & ASSOCIATES, INC., 2016.

Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters were used for the ambient noise level measurement survey. The meters were calibrated before and after use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

EXISTING ROADWAY NOISE LEVELS

To predict existing noise levels due to traffic, the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used. The model is based upon the Calveno reference noise emission factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA model was developed to predict hourly L_{eq} values for free-flowing traffic conditions.

Traffic volumes for existing conditions were obtained from the traffic data prepared for the proposed project by Fehr & Peers. Truck percentages and vehicle speeds on the local area roadways were estimated from field observations.

Traffic noise levels are predicted at the sensitive receptors located at the closest typical setback distance along each Plan Area roadway segment. Where traffic noise barriers are predominately along a roadway segment, a -5 dB offset was added to the noise prediction model to account for various noise barrier heights. A -5 dB offset was also applied where outdoor activity areas are shielded by intervening buildings. In some locations, sensitive receptors may be located at distances which vary from the assumed calculation distance and may experience shielding from intervening barriers or sound walls. However, the traffic noise analysis is believed to be representative of most sensitive receptors located closest to the Plan Area roadway segments analyzed in this section.

Table 3.7-3 shows the existing traffic noise levels in terms of L_{dn} at closest sensitive receptors along each roadway segment. A complete listing of the FHWA Model input data is contained in Appendix H.

TABLE 3.7-3: EXISTING TRAFFIC NOISE LEVELS

ROADWAY	*SEGMENT*	*EXTERIOR TRAFFIC NOISE LEVEL, DB L_{DN}*
Constitution Blvd.	South of E. Boronda	61.9
E. Boronda Rd.	N. Main to San Juan Grade	67.5
E. Boronda Rd.	San Juan Grade to McKinnon	66.4
E. Boronda Rd.	McKinnon to El Dorado	65.9
E. Boronda Rd.	El Dorado to Natividad	65.1
E. Boronda Rd.	Natividad to Independence	67.2
E. Boronda Rd.	Independence to Hemmingway	65.8
E. Boronda Rd.	Hemmingway to Constitution	58.4
E. Boronda Rd.	Constitution to N. Sanborn	60.3
E. Boronda Rd.	N. Sanborn to Williams	58.5
El Dorado Dr.	South of E. Boronda	54.3
Hemmingway Dr.	South of E. Boronda	55.5
Independence Blvd.	South of E. Boronda	60.6
McKinnon St.	South of E. Boronda	64.0

ROADWAY	*SEGMENT*	*EXTERIOR TRAFFIC NOISE LEVEL, DB L_{DN}*
N. Main St.	North of E. Boronda	67.0
N. Main St.	South of E. Boronda	65.3
N. Sanborn Rd.	South of E. Boronda	56.3
Natividad Rd.	South of E. Boronda	65.7
Natividad Rd.	E. Boronda to Future Russell Rd. Ext.	66.9
Natividad Rd.	Future Russell Rd. to Rogge	62.4
Natividad Rd.	North of Rogge	60.6
Old Stage Rd.	North of Future Constitution	57.9
Old Stage Rd.	Future Constitution to Williams	56.7
Old Stage Rd.	South of Williams	54.6
Rogge Rd.	San Juan Grade to Natividad	61.7
Russell Rd.	West of San Juan Grade	65.0
San Juan Grade Rd.	South of E. Boronda	65.2
San Juan Grade Rd.	E. Boronda to Van Buren	69.6
San Juan Grade Rd.	Van Buren to Russell	67.3
San Juan Grade Rd.	Russell to Rogge	66.0
San Juan Grade Rd.	North of Rogge	62.9
Van Buren Ave.	West of San Juan Grade	57.1
Williams Rd.	West of E. Boronda	62.1
Williams Rd.	East of E. Boronda	46.6

SOURCE: FHWA-RD-77-108 WITH INPUTS FROM FEHR & PEERS, AND J.C. BRENNAN & ASSOCIATES, INC. 2016.

3.7.2 REGULATORY SETTING

FEDERAL

There are no federal regulations related to noise that apply to the proposed project.

STATE

California Environmental Quality Act

The California Environmental Quality Act (CEQA) Guidelines, Appendix G, indicate that a significant noise impact may occur if a project exposes persons to noise or vibration levels more than local general plans or noise ordinance standards, or cause a substantial permanent or temporary increase in ambient noise levels. CEQA standards are discussed more below under the Thresholds of Significance section.

California State Building Codes

The State Building Code, Title 24, Part 2 of the State of California Code of Regulations establishes uniform minimum noise insulation performance standards to protect persons within new buildings which house people, including hotels, motels, dormitories, apartment houses and dwellings other

than single-family dwellings. Title 24 mandates that interior noise levels attributable to exterior sources shall not exceed 45 dB L_{dn} or CNEL in any habitable room.

Title 24 also mandates that for structures containing noise-sensitive uses to be located where the L_{dn} or CNEL exceeds 60 dB, an acoustical analysis must be prepared to identify mechanisms for limiting exterior noise to the prescribed allowable interior levels. If the interior allowable noise levels are met by requiring that windows be kept closed, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior environment.

City of Salinas General Plan

The City of Salinas General Plan Noise Element includes the following goals, policies, and actions regarding noise that are applicable to the proposed project:

Noise Element

Policy N-1-1: Ensure that new development be made compatible with the noise environment by using noise/land use compatibility standards and the Noise Contours Map as a guide for future planning and development decisions.

Policy N-1-2: Require the inclusion of noise-reducing design features in development and reuse/revitalization projects to address the impact of noise on residential development.

Policy N-1-3: Locate only urban development within the Salinas Municipal Airport "area of influence" that is compatible with the airport noise environment and meets the guidelines of the Caltrans Handbook.

Policy N-1-4: Ensure proposed development meets Title 24 Noise Insulation Standards for construction.

Policy N-2-1: Ensure that noise impacts generated by vehicular sources are minimized through the use of noise control measures (i.e. earthen berms, landscaped walls, lowered streets).

Policy N-2-2: Control truck traffic routing to reduce transportation related noise impacts on sensitive uses.

Policy N-3-1: Enforce the City of Salinas Noise Ordinance to ensure stationary noise sources and noise emanating from construction activities, private developments/residents and special events are minimized.

NOISE COMPATIBILITY STANDARDS

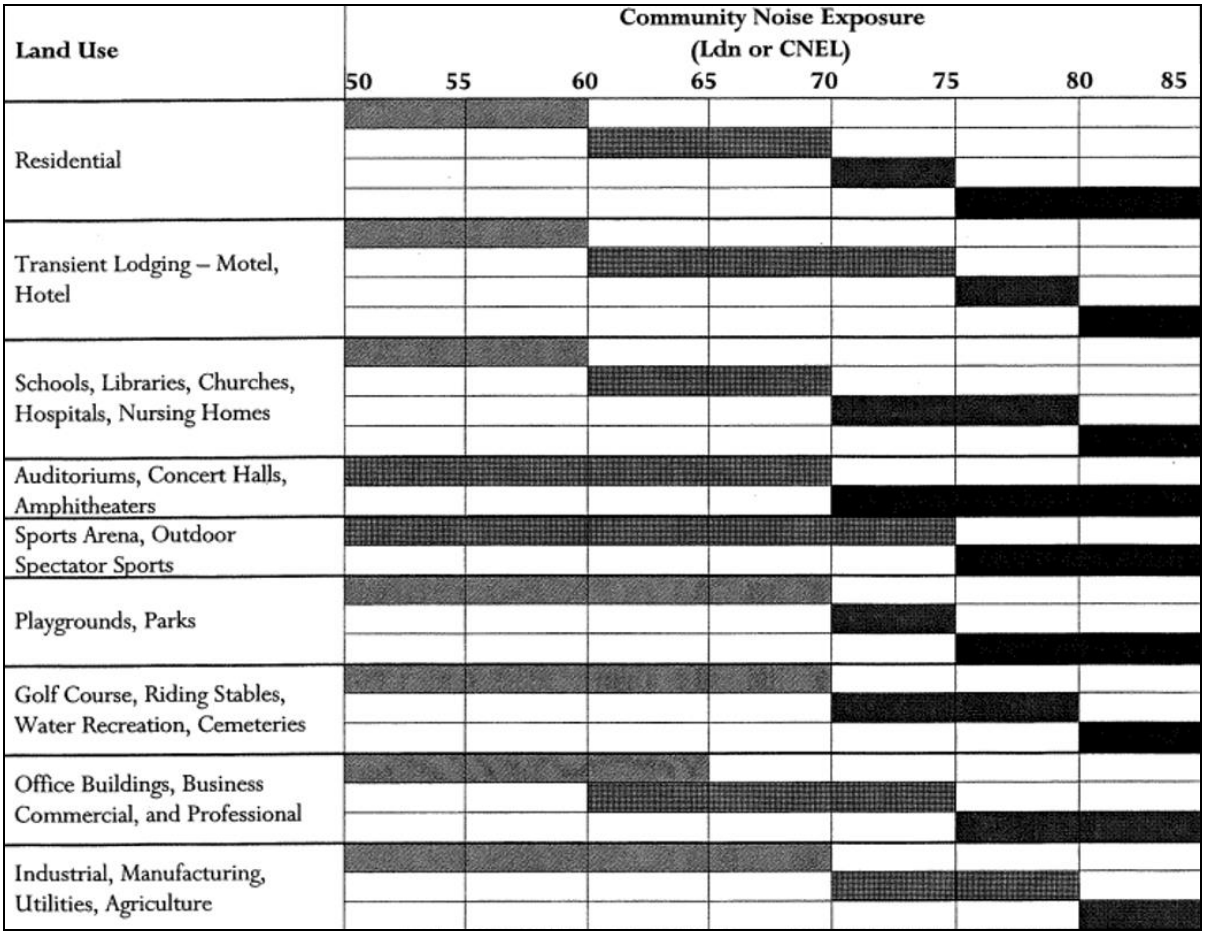
Table N-2 (reprinted as Table 3.7-4 below) of the General Plan shows a simplified view of the maximum noise level of several land use categories. Table N-3 (reprinted as Table 3.7-5 below) gives a detailed overview of the acceptable and unacceptable community noise exposure for all the land use categories that are applied throughout the City. Several of the land use categories are of relevance to the proposed project, namely Residential, Schools, Parks, and Agriculture. However, the Residential land use category is the most sensitive and as such it will be used as the bench mark for Acceptable and Unacceptable noise levels.

TABLE 3.7-4: EXTERIOR NOISE STANDARDS

DESIGNATION/DISTRICT OF PROPERTY RECEIVING NOISE	*MAXIMUM NOISE LEVEL, L_{DN} OR CNEL, DBA*
Agricultural	70
Residential	60
Commercial	65
Industrial	70
Public and Semipublic	60

SOURCE: CITY OF SALINAS GENERAL PLAN, TABLE N-2. SEPTEMBER 2002.

TABLE 3.7-5: NOISE/LAND USE COMPATIBILITY MATRIX



	ZONE A - NORMALLY ACCEPTABLE: *Specified land use is satisfactory, based upon the assumption that any buildings involved meet conventional Title 24 construction standards. No special noise insulation requirements.*
	ZONE B - CONDITIONALLY ACCEPTABLE: *New construction or development shall be undertaken only after a detailed noise analysis is made and noise reduction measure are identified and included in the project design.*
	ZONE C - NORMALLY UNACCEPTABLE: *New construction or development is discouraged. If new construction is proposed, a detailed analysis is required, noise reduction measures must be identified, and noise insulation features included in the design.*
	ZONE D - CLEARLY UNACCEPTABLE: *New construction or development clearly should not be undertaken.*

SOURCE: CITY OF SALINAS GENERAL PLAN, TABLE N-3. SEPTEMBER 2002.

Noise levels of up to 70 dBA are considered conditionally acceptable; new development exposed to such noise levels may only be undertaken after a detailed noise analysis is conducted and noise reduction measures are included in the project design. Noise exposure levels above 70 dBA are considered unacceptable. New development in such areas will likely need substantial mitigation to meet City standards.

City of Salinas Zoning Code and Noise Ordinance

Section 37-50.180 of the Zoning Code identifies performance standards for noise. The maximum noise level for Residential Districts, the most sensitive zone in the Plan Area, is set at 60 dBA. This standard is 5.0 dBA lower between 9:00 p.m. and 7:00 a.m. It is noted that there is a slight reprieve in that noise that is produced for no more than a cumulative period of five minutes in any hour may exceed the standard by 5.0 dBA. Furthermore, interior noise level in any residential dwelling unit located in a mixed-use building or development shall not exceed a maximum of 45 dBA from exterior ambient noise. Again, there is a slight reprieve in that noise that is produced for no more than a cumulative period of one minute in any hour may exceed the standards above by 10.0 dBA.

The City's Noise Ordinance, Chapter 21A of the Municipal Code, defines the following classes of noise (A through D) and defines noise regulations that pertain to each class:

- Class A Noise is defined as noise created by equipment operated in the public interest or for emergency or safety purposes. Such equipment includes sirens, street sweepers, garbage trucks, chipper machines, etc. Class A noise is allowed at any time.
- Class B Noise is defined as noise created or generated within or adjacent to residential property which is normally associated with residential living. Class B noise includes lawn mowers, trimmers, home appliances, vehicle repairs, home construction projects, etc. Class B noise is not allowed between 9:00 p.m. and 7:00 a.m.
- Class C Noise is defined as noise made by motorized or mechanical equipment or devices used in sporting, recreational and hobby activities. Class C noise includes go-carts, mini-bikes, model planes and cars, etc. Class C noise is not allowed between 9:00 p.m. and 7:00 a.m. Class C noise must be made at such a distance away from a residential area so that residents will not be unreasonably disturbed by the noise of the equipment or devices.
- Class D Noise is defined as noise that is unnecessary, unnatural or unusual noises created by a human voice or animal outcry, or by any other means which is so annoying, or which

is so harsh or prolonged, as to be injurious to the health, peace or comfort of any reasonable person residing in the area. Class D noise is not permitted at any time.

VIBRATION STANDARDS

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

The City of Salinas does not have specific policies pertaining to vibration levels. However, vibration levels associated with construction activities and railroad operations are addressed as potential noise impacts associated with Project implementation.

Human and structural response to different vibration levels is influenced by several factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table 3.7-6 indicates that the threshold for damage to structures ranges from 0.2 to 0.6 peak particle velocity in inches per second (in/sec p.p.v). One-half this minimum threshold or 0.1 in/sec p.p.v. is considered a safe criterion that would protect against architectural or structural damage. The general threshold at which human annoyance could occur is noted as 0.1 in/sec p.p.v.

TABLE 3.7-6: EFFECTS OF VIBRATION ON PEOPLE AND BUILDINGS

PEAK PARTICLE VELOCITY		*HUMAN REACTION*	*EFFECT ON BUILDINGS*
MM/SEC.	*IN./SEC.*		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage.

SOURCE: CALTRANS. TRANSPORTATION RELATED EARTHBORN VIBRATIONS. TAV-02-01-R9601 FEBRUARY 20, 2002.

3.7.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the project will have a significant impact related to noise if it will result in:

- 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;
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project;
- 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, expose people residing or working in the project area to excessive noise levels within two miles of a public airport or public use airport; or
- For a project within the vicinity of a private airstrip, expose people residing or working in the Project area to excessive noise levels.

The Plan Area is not located within two miles of a public or private airport or airstrip. Therefore, airplane and airport noise is not discussed further in this analysis.

Determination of a Significant Increase in Noise Levels

The noise standards applicable to the proposed project include the relevant portions of the City of Salinas General Plan, the City of Salinas Zoning Ordinance and Noise Ordinance described in the Regulatory Framework section above, and the following standards. Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to severe noise levels. In practice, more specific professional standards have been developed. These standards state that a noise impact may be considered significant if it would generate noise that would conflict with local project criteria or ordinances, or substantially increase noise levels at noise sensitive land uses. The potential increase in traffic noise from the proposed project is a factor in determining significance. Research into the human perception of changes in sound level indicates the following:

- A 3-dB change is barely perceptible;
- A 5-dB change is clearly perceptible; and
- A 10-dB change is perceived as being twice or half as loud.

A limitation of using a single noise level increase value to evaluate noise impacts is that it fails to account for pre-project-noise conditions. Table 3.7-7 is based upon recommendations made by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient noise levels resulting from aircraft operations. The recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been accepted that they are applicable to all sources of noise described in terms of cumulative noise exposure metrics such as the L_{dn}.

TABLE 3.7-7: SIGNIFICANCE OF CHANGES IN NOISE EXPOSURE

AMBIENT NOISE LEVEL WITHOUT PROJECT, LDN	*INCREASE REQUIRED FOR SIGNIFICANT IMPACT*
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

SOURCE: FEDERAL INTERAGENCY COMMITTEE ON NOISE (FICON)

Based on the Table 3.7-7 data, an increase in the traffic noise level of 5 dB or more would be significant where the pre-project noise levels are less than 60 dB L_{dn}, or 3 dB or more where existing noise levels are between 60 to 65 dB Ldn. Extending this concept to higher noise levels, an increase in the traffic noise level of 1.5 dB or more may be significant where the pre-project traffic noise level exceeds 65 dB L_{dn}. The rationale for the Table 3.7-7 criteria is that, as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause annoyance.

IMPACTS AND MITIGATION MEASURES

Impact 3.7-1: The proposed project has the potential to increase traffic noise levels at existing receptors (Significant and Unavoidable)

PROPOSED PROJECT ANALYSIS

Tables 3.7-8 through 3.7-11 show the predicted traffic noise level increases on the local roadway network for Existing No Project, Existing + Project, Existing + Project + Central Area Specific Plan (CASP), Cumulative, Cumulative + Project, and Cumulative + Project + CASP conditions. Appendix H provides the complete inputs and results of the FHWA traffic noise modeling.

TABLE 3.7-8: EXISTING AND EXISTING PLUS PROJECT TRAFFIC NOISE LEVELS

ROADWAY	*SEGMENT*	*NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS*				
		EXISTING	*EXISTING + PROJECT*	*CHANGE*	*CRITERIA*[1]	*SIGNIFICANT?*
Constitution Blvd.	South of E. Boronda	61.9	63.4	1.5	+3 dB	No
E. Boronda Rd.	N. Main to San Juan Grade	67.5	68.0	0.4	+1.5 dB	No
E. Boronda Rd.	San Juan Grade to McKinnon	66.4	66.9	0.5	+1.5 dB	No
E. Boronda Rd.	McKinnon to El Dorado	65.9	66.5	0.6	+1.5 dB	No
E. Boronda Rd.	El Dorado to Natividad	65.1	66.0	0.9	+1.5 dB	No
E. Boronda Rd.	Natividad to Independence	67.2	68.2	1.0	+1.5 dB	No
E. Boronda Rd.	Independence to Hemmingway	65.8	66.7	0.9	+1.5 dB	No
E. Boronda Rd.	Hemmingway to Constitution	58.4	59.7	1.2	+5 dB or > 60 dB	No
E. Boronda Rd.	Constitution to N. Sanborn	60.3	62.1	1.8	+3 dB	No
E. Boronda Rd.	N. Sanborn to Williams	58.5	59.7	1.2	+5 dB or > 60 dB	No
El Dorado Dr.	South of E. Boronda	54.3	54.7	0.5	+5 dB or > 60 dB	No
Hemmingway Dr.	South of E. Boronda	55.5	56.6	1.1	+5 dB or > 60 dB	No
Independence Blvd.	South of E. Boronda	60.6	62.6	2.0	+3 dB	No
McKinnon St.	South of E. Boronda	64.0	64.2	0.2	+3 dB	No
N. Main	North of E. Boronda	67.0	67.1	0.2	+1.5 dB	No
N. Main	South of E. Boronda	65.3	65.3	0.0	+1.5 dB	No
N. Sanborn Rd.	South of E. Boronda	56.3	58.3	2.0	+5 dB or > 60 dB	No
Natividad Rd.	**South of E. Boronda**	**65.7**	**67.3**	**1.6**	**+1.5 dB**	**Yes**
Natividad Rd.	E. Boronda to Future Russell Rd.	66.9	68.1	1.2	+1.5 dB	No
Natividad Rd.	Future Russell Rd. to Rogge	62.4	63.7	1.4	+3 dB	No
Natividad Rd.	North of Rogge	60.6	61.0	0.5	+3 dB	No
Old Stage Rd.	North of Future Constitution	57.9	59.4	1.5	+5 dB or > 60 dB	No
Old Stage Rd.	Future Constitution to Williams	56.7	58.3	1.5	+5 dB or > 60 dB	No

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		EXISTING	EXISTING + PROJECT	CHANGE	CRITERIA[1]	SIGNIFICANT?
Old Stage Rd.	South of Williams	54.6	55.2	0.6	+5 dB or > 60 dB	No
Rogge Rd.	San Juan Grade to Natividad	61.7	63.4	1.6	+3 dB	No
Russell Rd.	West of San Juan Grade	65.0	65.8	0.8	+1.5 dB	No
San Juan Grade Rd.	South of E. Boronda	65.2	65.2	0.0	+1.5 dB	No
San Juan Grade Rd.	E. Boronda to Van Buren	69.6	69.8	0.2	+1.5 dB	No
San Juan Grade Rd.	Van Buren to Russell	67.3	67.3	0.0	+1.5 dB	No
San Juan Grade Rd.	Russell to Rogge	66.0	66.9	0.9	+1.5 dB	No
San Juan Grade Rd.	North of Rogge	62.9	62.9	0.0	+3 dB	No
Van Buren Ave.	West of San Juan Grade	57.1	57.8	0.7	+5 dB or > 60 dB	No
Williams Rd.	West of E. Boronda	62.1	63.6	1.5	+3 dB	No
Williams Rd.	East of E. Boronda	46.6	48.0	1.4	+5 dB or > 60 dB	No

NOTE: [1] WHERE EXISTING NOISE LEVELS ARE LESS THAN 60 DB AN INCREASE OF 5 DB WOULD BE A SIGNIFICANT INCREASE. ADDITIONALLY, ANY INCREASE CAUSING NOISE LEVELS TO EXCEED THE CITY'S NORMALLY ACCEPTABLE 60 DB LDN NOISE LEVEL STANDARD AT AN EXISTING OUTDOOR ACTIVITY AREA OF A RESIDENTIAL USE WOULD ALSO BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 60 DB BUT ARE LESS THAN 65 DB, AN INCREASE OF 3 DB OR MORE WOULD BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 65 DB, AN INCREASE OF 1.5 DB OR MORE WOULD BE SIGNIFICANT. ***BOLD*** *TEXT INDICATES UNACCEPTABLE NOISE INCREASE.*

SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2016.

TABLE 3.7-9: EXISTING AND EXISTING PLUS PROJECT + CASP TRAFFIC NOISE LEVELS

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		EXISTING	EXISTING + PROJECT + CASP	CHANGE	CRITERIA[1]	SIGNIFICANT?
Constitution Blvd.	South of E. Boronda	61.9	63.4	1.5	+3 dB	No
E. Boronda Rd.	N. Main to San Juan Grade	67.5	68.0	0.4	+1.5 dB	No
E. Boronda Rd.	San Juan Grade to McKinnon	66.4	66.9	0.5	+1.5 dB	No
E. Boronda Rd.	McKinnon to El Dorado	65.9	66.5	0.6	+1.5 dB	No
E. Boronda Rd.	El Dorado to Natividad	65.1	66.0	0.9	+1.5 dB	No
E. Boronda Rd.	Natividad to Independence	67.2	68.2	1.0	+1.5 dB	No
E. Boronda Rd.	Independence to Hemmingway	65.8	66.7	0.9	+1.5 dB	No
E. Boronda Rd.	Hemmingway to Constitution	58.4	59.7	1.2	+5 dB or > 60 dB	No
E. Boronda Rd.	Constitution to N. Sanborn	60.3	62.1	1.8	+3 dB	No
E. Boronda Rd.	N. Sanborn to Williams	58.5	59.7	1.2	+5 dB or > 60 dB	No
El Dorado Dr.	South of E. Boronda	54.3	54.7	0.5	+5 dB or > 60 dB	No
Hemmingway Dr.	South of E. Boronda	55.5	56.6	1.1	+5 dB or > 60 dB	No

Roadway	Segment	Noise Levels (L_{DN}, dB) at Nearest Sensitive Receptors				
		Existing	Existing + Project + CASP	Change	Criteria[1]	Significant?
Independence Blvd.	South of E. Boronda	60.6	62.6	2.0	+3 dB	No
McKinnon St.	South of E. Boronda	64.0	64.2	0.2	+3 dB	No
N. Main	North of E. Boronda	67.0	67.1	0.2	+1.5 dB	No
N. Main	South of E. Boronda	65.3	65.3	0.0	+1.5 dB	No
N. Sanborn Rd.	South of E. Boronda	56.3	58.3	2.0	+5 dB or > 60 dB	No
Natividad Rd.	**South of E. Boronda**	**65.7**	**67.3**	**1.6**	**+1.5 dB**	**Yes**
Natividad Rd.	E. Boronda to Future Russell Rd.	66.9	68.1	1.2	+1.5 dB	No
Natividad Rd.	Future Russell Rd. to Rogge	62.4	63.7	1.4	+3 dB	No
Natividad Rd.	North of Rogge	60.6	61.0	0.5	+3 dB	No
Old Stage Rd.	North of Future Constitution	57.9	59.4	1.5	+5 dB or > 60 dB	No
Old Stage Rd.	Future Constitution to Williams	56.7	58.3	1.5	+5 dB or > 60 dB	No
Old Stage Rd.	South of Williams	54.6	55.2	0.6	+5 dB or > 60 dB	No
Rogge Rd.	San Juan Grade to Natividad	61.7	63.4	1.6	+3 dB	No
Russell Rd.	West of San Juan Grade	65.0	65.8	0.8	+1.5 dB	No
San Juan Grade Rd.	South of E. Boronda	65.2	65.2	0.0	+1.5 dB	No
San Juan Grade Rd.	E. Boronda to Van Buren	69.6	69.8	0.2	+1.5 dB	No
San Juan Grade Rd.	Van Buren to Russell	67.3	67.3	0.0	+1.5 dB	No
San Juan Grade Rd.	Russell to Rogge	66.0	66.9	0.9	+1.5 dB	No
San Juan Grade Rd.	North of Rogge	62.9	62.9	0.0	+3 dB	No
Van Buren Ave.	West of San Juan Grade	57.1	57.8	0.7	+5 dB or > 60 dB	No
Williams Rd.	West of E. Boronda	62.1	63.6	1.5	+3 dB	No
Williams Rd.	East of E. Boronda	46.6	48.0	1.4	+5 dB or > 60 dB	No

NOTE: [1] EXISTING NOISE LEVELS ARE LESS THAN 60 DB AN INCREASE OF 5 DB WOULD BE A SIGNIFICANT INCREASE. ADDITIONALLY, ANY INCREASE CAUSING NOISE LEVELS TO EXCEED THE CITY'S NORMALLY ACCEPTABLE 60 DB LDN NOISE LEVEL STANDARD AT AN EXISTING OUTDOOR ACTIVITY AREA OF A RESIDENTIAL USE WOULD ALSO BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 60 DB BUT ARE LESS THAN 65 DB, AN INCREASE OF 3 DB OR MORE WOULD BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 65 DB, AN INCREASE OF 1.5 DB OR MORE WOULD BE SIGNIFICANT. ***BOLD*** *TEXT INDICATES UNACCEPTABLE NOISE INCREASE.*
SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2016.

TABLE 3.7-10: CUMULATIVE AND CUMULATIVE PLUS PROJECT TRAFFIC NOISE LEVELS

Roadway	Segment	Noise Levels (L_{DN}, dB) at Nearest Sensitive Receptors				
		Cumulative	Cumulative + Project	Change	Criteria[1]	Significant ?
Constitution Blvd.	South of E. Boronda	62.2	64.7	2.5	+3 dB	No
E. Boronda Rd.	N. Main to San Juan Grade	66.5	67.9	1.3	+1.5 dB	No
E. Boronda Rd.	**San Juan Grade to McKinnon**	**65.3**	**67.7**	**2.4**	**+1.5 dB**	**Yes**

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		CUMULATIVE	CUMULATIVE + PROJECT	CHANGE	CRITERIA[1]	SIGNIFICANT ?
E. Boronda Rd.	McKinnon to El Dorado	64.4	65.9	1.4	+3 dB	No
E. Boronda Rd.	El Dorado to Natividad	64.1	67.0	2.9	+3 dB	No
E. Boronda Rd.	Natividad to Independence	66.6	68.0	1.4	+1.5 dB	No
E. Boronda Rd.	**Independence to Hemmingway**	**65.1**	**66.9**	**1.8**	**+1.5 dB**	**Yes**
E. Boronda Rd.	Hemmingway to Constitution	58.2	59.9	1.7	+5 dB or > 60 dB	No
E. Boronda Rd.	Constitution to N. Sanborn	60.6	63.0	2.4	+3 dB	No
E. Boronda Rd.	**N. Sanborn to Williams**	**59.6**	**62.0**	**2.4**	**+5 dB or > 60 dB**	**Yes**
El Dorado Dr.	South of E. Boronda	54.1	54.9	0.8	+5 dB or > 60 dB	No
Hemmingway Dr.	South of E. Boronda	54.8	54.8	0.0	+5 dB or > 60 dB	No
Independence Blvd.	South of E. Boronda	60.5	60.8	0.3	+3 dB	No
McKinnon St.	South of E. Boronda	63.6	65.2	1.6	+3 dB	No
N. Main	North of E. Boronda	69.7	69.7	0.0	+1.5 dB	No
N. Main	South of E. Boronda	66.8	66.9	0.0	+1.5 dB	No
N. Sanborn Rd.	South of E. Boronda	56.3	58.4	2.1	+5 dB or > 60 dB	No
Natividad Rd.	**South of E. Boronda**	**63.0**	**66.8**	**3.7**	**+3 dB**	**Yes**
Natividad Rd.	**E. Boronda to Future Russell Rd.**	**64.1**	**67.1**	**3.0**	**+3 dB**	**Yes**
Natividad Rd.	Future Russell Rd. to Rogge	64.1	64.3	0.2	+3 dB	No
Natividad Rd.	North of Rogge	62.0	62.3	0.3	+3 dB	No
Old Stage Rd.	North of Future Constitution	59.1	59.1	0.0	+5 dB or > 60 dB	No
Old Stage Rd.	Future Constitution to Williams	58.0	58.0	0.0	+5 dB or > 60 dB	No
Old Stage Rd.	South of Williams	56.2	56.2	0.0	+5 dB or > 60 dB	No
Rogge Rd.	San Juan Grade to Natividad	61.7	61.7	0.0	+3 dB	No
Russell Rd.	West of San Juan Grade	67.5	68.7	1.2	+1.5 dB	No
San Juan Grade Rd.	South of E. Boronda	65.8	66.7	0.8	+1.5 dB	No
San Juan Grade Rd.	E. Boronda to Van Buren	69.3	69.5	0.2	+1.5 dB	No
San Juan Grade Rd.	Van Buren to Russell	69.0	69.3	0.3	+1.5 dB	No
San Juan Grade Rd.	Russell to Rogge	66.0	66.5	0.5	+1.5 dB	No
San Juan Grade Rd.	North of Rogge	63.1	63.8	0.7	+3 dB	No
Van Buren Ave.	West of San Juan Grade	57.3	57.3	0.0	+5 dB or > 60 dB	No
Williams Rd.	West of E. Boronda	64.6	66.2	1.6	+3 dB	No
Williams Rd.	East of E. Boronda	51.7	51.7	0.0	+5 dB or > 60 dB	No

NOTE: [1] WHERE EXISTING NOISE LEVELS ARE LESS THAN 60 DB AN INCREASE OF 5 DB WOULD BE A SIGNIFICANT INCREASE. ADDITIONALLY, ANY INCREASE CAUSING NOISE LEVELS TO EXCEED THE CITY'S NORMALLY ACCEPTABLE 60 DB LDN NOISE LEVEL

STANDARD AT AN EXISTING OUTDOOR ACTIVITY AREA OF A RESIDENTIAL USE WOULD ALSO BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 60 DB BUT ARE LESS THAN 65 DB, AN INCREASE OF 3 DB OR MORE WOULD BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 65 DB, AN INCREASE OF 1.5 DB OR MORE WOULD BE SIGNIFICANT. ***BOLD*** *TEXT INDICATES UNACCEPTABLE NOISE INCREASE.*
SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2016.

TABLE 3.7-11: CUMULATIVE AND CUMULATIVE PLUS PROJECT + CASP TRAFFIC NOISE LEVELS

		NOISE LEVELS (L_{DN}, DB) AT NEAREST SENSITIVE RECEPTORS				
ROADWAY	*SEGMENT*	*CUMULATIVE*	*CUMULATIVE + PROJECT + CASP*	*CHANGE*	*CRITERIA*[1]	*SIGNIFICANT?*
Constitution Blvd.	**South of E. Boronda**	**62.2**	**65.7**	**3.5**	**+3 dB**	**Yes**
E. Boronda Rd.	**N. Main to San Juan Grade**	**66.5**	**68.1**	**1.5**	**+1.5 dB**	**Yes**
E. Boronda Rd.	**San Juan Grade to McKinnon**	**65.3**	**67.9**	**2.6**	**+1.5 dB**	**Yes**
E. Boronda Rd.	McKinnon to El Dorado	64.4	66.1	1.7	+3 dB	No
E. Boronda Rd.	**El Dorado to Natividad**	**64.1**	**67.4**	**3.3**	**+3 dB**	**Yes**
E. Boronda Rd.	**Natividad to Independence**	**66.6**	**69.3**	**2.6**	**+1.5 dB**	**Yes**
E. Boronda Rd.	**Independence to Hemmingway**	**65.1**	**68.6**	**3.5**	**+1.5 dB**	**Yes**
E. Boronda Rd.	**Hemmingway to Constitution**	**58.2**	**61.3**	**3.0**	**+5 dB or > 60 dB**	**Yes**
E. Boronda Rd.	Constitution to N. Sanborn	60.6	63.8	3.2	+3 dB	No
E. Boronda Rd.	**N. Sanborn to Williams**	**59.6**	**62.7**	**3.1**	**+5 dB or > 60 dB**	**Yes**
El Dorado Dr.	South of E. Boronda	54.1	54.9	0.8	+5 dB or > 60 dB	No
Hemmingway Dr.	South of E. Boronda	54.8	58.8	4.0	+5 dB or > 60 dB	No
Independence Blvd.	South of E. Boronda	60.5	62.1	1.6	+3 dB	No
McKinnon St.	South of E. Boronda	63.6	65.3	1.7	+3 dB	No
N. Main	North of E. Boronda	69.7	69.7	0.0	+1.5 dB	No
N. Main	South of E. Boronda	66.8	67.0	0.2	+1.5 dB	No
N. Sanborn Rd.	South of E. Boronda	56.3	58.9	2.6	+5 dB or > 60 dB	No
Natividad Rd.	**South of E. Boronda**	**63.0**	**67.5**	**4.5**	**+3 dB**	**Yes**
Natividad Rd.	**E. Boronda to Future Russell Rd.**	**64.1**	**67.9**	**3.8**	**+3 dB**	**Yes**
Natividad Rd.	Future Russell Rd. to Rogge	64.1	64.9	0.8	+3 dB	No
Natividad Rd.	North of Rogge	62.0	63.0	1.1	+3 dB	No
Old Stage Rd.	North of Future Constitution	59.1	59.8	0.7	+5 dB or > 60 dB	No
Old Stage Rd.	Future Constitution to Williams	58.0	58.7	0.7	+5 dB or > 60 dB	No
Old Stage Rd.	South of Williams	56.2	57.2	1.0	+5 dB or > 60 dB	No
Rogge Rd.	San Juan Grade to Natividad	61.7	61.7	0.0	+3 dB	No
Russell Rd.	**West of San Juan Grade**	**67.5**	**69.4**	**1.9**	**+1.5 dB**	**Yes**
San Juan Grade Rd.	South of E. Boronda	65.8	66.9	1.1	+1.5 dB	No
San Juan Grade Rd.	E. Boronda to Van Buren	69.3	69.5	0.2	+1.5 dB	No

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		CUMULATIVE	CUMULATIVE + PROJECT + CASP	CHANGE	CRITERIA[1]	SIGNIFICANT?
San Juan Grade Rd.	Van Buren to Russell	69.0	69.3	0.3	+1.5 dB	No
San Juan Grade Rd.	Russell to Rogge	66.0	66.5	0.5	+1.5 dB	No
San Juan Grade Rd.	North of Rogge	63.1	63.8	0.7	+3 dB	No
Van Buren Ave.	West of San Juan Grade	57.3	57.3	0.0	+5 dB or > 60 dB	No
Williams Rd.	West of E. Boronda	64.6	66.8	2.2	+3 dB	No
Williams Rd.	East of E. Boronda	51.7	51.8	0.1	+5 dB or > 60 dB	No

NOTE: [1] WHERE EXISTING NOISE LEVELS ARE LESS THAN 60 DB AN INCREASE OF 5 DB WOULD BE A SIGNIFICANT INCREASE. ADDITIONALLY, ANY INCREASE CAUSING NOISE LEVELS TO EXCEED THE CITY'S NORMALLY ACCEPTABLE 60 DB LDN NOISE LEVEL STANDARD AT AN EXISTING OUTDOOR ACTIVITY AREA OF A RESIDENTIAL USE WOULD ALSO BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 60 DB BUT ARE LESS THAN 65 DB, AN INCREASE OF 3 DB OR MORE WOULD BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 65 DB, AN INCREASE OF 1.5 DB OR MORE WOULD BE SIGNIFICANT. ***BOLD*** *TEXT INDICATES UNACCEPTABLE NOISE INCREASE.*

SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2016.

As shown in Tables 3.7-8 through 3.7-11, some noise-sensitive receptors located along the Plan Area roadways are currently exposed to exterior traffic noise levels exceeding the City of Salinas 60 dB L_{dn} exterior noise level standard for residential uses. These receptors would continue to experience elevated exterior noise levels with implementation of the proposed project. For example, under Existing conditions sensitive receptors located adjacent to E. Boronda Road between N. Main and San Juan Grade currently experience an exterior noise level of approximately 67.5 dB L_{dn}. This exceeds the City's Normally Acceptable exterior noise level standard of 60 dB L_{dn}. Under Existing Plus Project conditions, exterior traffic noise levels are predicted to be approximately 68.0 dB L_{dn}. This would still exceed the City's Normally Acceptable exterior noise level standard of 60 dB L_{dn}. However, the proposed project's contribution of 0.4 dB would not exceed the FICON criteria of 1.5 dB where existing noise levels exceed 65 dB. Therefore, the project's contribution to noise in this location would be a less than significant impact at this location.

In some locations, the proposed project is predicted to cause increases in traffic noise levels which would trigger a new exceedance of the City of Salinas' 60 dB L_{dn} exterior noise level standard at sensitive receptor locations, or exceed the FICON allowable increase criteria outlined in Table 3.7-7. The greatest number of significant traffic noise increases would occur under the Cumulative + Project + CASP traffic condition. However, all analyzed plus project traffic scenarios would result in significant increases in traffic noise.

Significant traffic noise increases under the Cumulative + Project + CASP traffic condition include the following:

- Constitution Blvd., South of E. Boronda – noise levels are predicted to increase by 3.5 dB from 62.2 dB to 65.7 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Main to San Juan Grade – noise levels are predicted to increase by 1.5 dB from 66.5 dB to 68.1 dB L_{dn}. This would equal the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, San Juan Grade to McKinnon – noise levels are predicted to increase by 2.6 dB from 65.3 dB to 67.9 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, El Dorado to Natividad – noise levels are predicted to increase by 3.3 dB from 64.1 dB to 66.1 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Natividad to Independence – noise levels are predicted to increase by 2.6 dB from 66.6 dB to 69.3 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Independence to Hemmingway – noise levels are predicted to increase by 3.5 dB from 65.1 dB to 68.6 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Hemmingway to Constitution – noise levels are predicted to increase by 3.0 dB from 58.2 dB to 61.3 dB L_{dn}. This would not exceed the FICON criteria of 5 dB where existing noise levels are less than 60 dB, as outlined in Table 3.7-7, but would cause a new exceedance of the City's 60 dB L_{dn} exterior noise level standard at outdoor activity areas of the nearest residential receptors.
- E. Boronda Road, N. Sanborn to Williams – noise levels are predicted to increase by 3.1 dB from 59.6 dB to 62.7dB L_{dn}. This would not exceed the FICON criteria of 5 dB where existing noise levels are less than 60 dB, as outlined in Table 3.7-7, but would cause a new exceedance of the City's 60 dB L_{dn} exterior noise level standard at outdoor activity areas of the nearest residential receptors.
- Natividad Road., South of E. Boronda – noise levels are predicted to increase by 4.5 dB from 63.0 dB to 67.5 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7.
- Natividad Road., E. Boronda to Future Russell Road – noise levels are predicted to increase by 3.8 dB from 63.0 dB to 67.5 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7. However, it should be noted that this roadway segment is located between the WASP and CASP projects and future sensitive receptors along this roadway would be constructed with noise control measures designed to achieve compliance with the City of Salinas exterior and interior noise level standards.
- Russell Road, West of San Juan Grade – noise levels are predicted to increase by 1.9 dB from 67.5 dB to 69.4 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.

CONCLUSION

The proposed Project would cause increased noise levels exceeding the City of Salinas 60 dB L_{dn} exterior noise level standard at existing residential receptors. Therefore, this would be a **potentially significant** impact. Additionally, traffic noise level increases would exceed the FICON CEQA substantial increase criteria of 1.5 to 5 dB, as outlined in Table 3.7-7. Therefore, this would be a **potentially significant** impact.

Increasing the height of existing sound walls could be a potential mitigation measure; however, this is generally not practical or feasible because the footings for the walls would need to be reengineered and resized. Additionally, building new off-site sound walls generally has little affect on reducing traffic noise levels due to openings in the walls for access or circulation purposes. The use of quieter pavement technologies could be a potential mitigation measure. Research shows that a minimum of 3 dBA can be achieved by using alternative pavements, such as rubberized asphalt or open gap materials. Costs for these pavement technologies vary, but they have been proven to be comparable to traditional pavements. Implementation of this mitigation measure along eleven of the affected roadway segments is not considered practical and would likely not be technically feasible at all locations. Furthermore, given the number of affected roadways, it may not be economically feasible to repave all affected roadways. Therefore, even with implementation of the following mitigation, this would be a ***significant and unavoidable*** impact.

MITIGATION MEASURES

Mitigation Measure 3.7-1: *The project applicant shall consider repaving roadway segments which result in significant increases in traffic noise with alternative pavements. These repaving projects shall only occur where existing residential uses are adjacent to the roadways, when they are located inside of the 60 dB L_{dn} contours shown in Tables 3.7-8 through 3.7-11, or when they exceed the FICON criteria. Sixty dB L_{dn} is considered an acceptable exterior noise level standard.*

Under the Existing and Existing Plus Project *scenario (Table 3.7-8), Natividad Road, south of East Boronda, experiences a significant increase in traffic noise levels and the use of alternative pavements would result in a less than significant increase in noise levels. The project does not result in noise levels which exceed the 60 dB L_{dn} standard at residences which currently are below 60 dB L_{dn}.*

Under the Existing and Existing Plus Project + CASP *scenario (Table 3.7-9), Natividad Road, south of East Boronda, experiences a significant increase in traffic noise levels and the use of alternative pavements would result in a less than significant increase in noise levels. The project does not result in noise levels which exceed the 60 dB L_{dn} standard at residences which currently are below 60 dB L_{dn}.*

Under the Cumulative and Cumulative Plus Project *scenario (Table 3.7-10), the following roadway segments would experience a significant increase in traffic noise levels:*

- *East Boronda Road (San Juan Grade to McKinnon);*

- *East Boronda Road (Independence to Hemmingway);*
- *East Boronda Road (N. Sanborn to Williams); and*
- *Natividad Road (South of East Boronda).*

The use of alternative pavements would result in a less than significant increase in noise levels. The project does not result in noise levels which exceed the 60 dB L_{dn} standard at residences which currently are below 60 dB L_{dn}.

***Under the Cumulative and Cumulative Plus Project + CASP** scenario (Table 3.7-11), the following roadways experience a significant increase in traffic noise levels:*

- *Constitution Boulevard (South of E. Boronda);*
- *East Boronda Road (N. Main to San Juan Grade);*
- *East Boronda Road (El Dorado to Natividad);*
- *East Boronda Road (Natividad to Independence);*
- *East Boronda Road (Independence to Hemmingway);*
- *East Boronda Road (Hemmingway to Constitution);*
- *East Boronda Road (N. Sanborn to Williams);*
- *Natividad Road (South of E. Boronda);*
- *Natividad Road (E. Boronda to Future Russel Road); and*
- *Russel Road (West of San Juan Grade).*

The use of alternative pavements would result in a less than significant increase in noise levels. The project would result in noise levels which exceed the 60 dB L_{dn} standard at residences which currently are below 60 dB L_{dn} at both E. Boronda Road (Hemmingway to Constitution) and E. Boronda (N. Sanborn to Williams). The use of alternative pavements would result in a less than significant increase in noise levels and reduce traffic noise levels to less than 60 dB L_{dn}.

Impact 3.7-2: The proposed project has the potential to increase noise levels associated with construction activities (Less than Significant with Mitigation)

During the construction of the project, including roads, water, and sewer lines, and related infrastructure, noise from construction activities would add to the noise environment in the project vicinity. As indicated in Table 3.7-12, activities involved in construction would generate maximum noise levels ranging from 76 to 90 dB at 50 feet. Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A significant project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from construction sites. This noise increase would be of short duration and would likely occur primarily during daytime hours.

TABLE 3.7-12: CONSTRUCTION EQUIPMENT NOISE

TYPE OF EQUIPMENT	*MAXIMUM LEVEL, DB AT 50 FEET*
Backhoe	78
Compactor	83
Compressor (air)	78
Concrete Saw	90
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Jackhammer	89
Pneumatic Tools	85

SOURCE: ROADWAY CONSTRUCTION NOISE MODEL USER'S GUIDE. FEDERAL HIGHWAY ADMINISTRATION. FHWA-HEP-05-054. JANUARY 2006.

Construction activities would be temporary in nature and are exempt from noise regulation during the hours of 7:00 a.m. to 9:00 p.m., as outlined in the City's Municipal Code for Type B noise. Implementation of the following mitigation measures will ensure that these potential impacts are reduced to a ***less than significant*** level.

MITIGATION MEASURES

Mitigation Measure 3.7-2: *Construction activities shall adhere to the requirements of the City of Salinas Municipal Code with respect to hours of operation. This requirement shall be noted in the improvements plans prior to approval by the City's Public Works Department.*

Mitigation Measure 3.7-3: *All equipment shall be fitted with factory equipped mufflers and in good working order. This requirement shall be noted in the improvements plans prior to approval by the City's Public Works Department.*

Impact 3.7-3: The proposed project has the potential to increase noise vibration association with construction activities (Less than Significant)

The primary vibration-generating activities associated with the proposed project would happen during construction when activities such as grading, utilities placement, and road construction occur. Sensitive receptors which could be impacted by construction-related vibrations, especially vibratory compactors/rollers, are located approximately 100 feet or further from the Plan Area. At this distance, construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours.

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of

perception. Building damage can take the form of cosmetic or structural. Table 3.7-13 shows the typical vibration levels produced by construction equipment.

TABLE 3.7-13: VIBRATION LEVELS FOR VARYING CONSTRUCTION EQUIPMENT

TYPE OF EQUIPMENT	*PEAK PARTICLE VELOCITY @ 25 FEET (INCHES/SECOND)*	*PEAK PARTICLE VELOCITY @ 100 FEET (INCHES/SECOND)*
Large Bulldozer	0.089	0.011
Loaded Trucks	0.076	0.010
Small Bulldozer	0.003	0.000
Auger/drill Rigs	0.089	0.011
Jackhammer	0.035	0.004
Vibratory Hammer	0.070	0.009
Vibratory Compactor/roller	0.210	0.026

SOURCE: FEDERAL TRANSIT ADMINISTRATION, TRANSIT NOISE AND VIBRATION IMPACT ASSESSMENT GUIDELINES, MAY 2006

Table 3.7-13 data indicate that construction vibration levels anticipated for the proposed project are less than the 0.1 in/sec criteria at distances of 50 feet. Therefore, construction vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors. Implementation of the proposed project would have a ***less than significant*** impact relative to this environmental topic.

Impact 3.7-4: The proposed project has the potential to expose new sensitive receptors to excessive transportation noise (Less than Significant with Mitigation)

EXTERIOR NOISE IMPACTS

The FHWA traffic noise prediction model was used to predict Cumulative + Project + CASP traffic noise levels at the proposed residential land uses associated with the proposed project. Table 3.7-14 shows the predicted traffic noise levels at the proposed residential uses adjacent to the major Plan Area arterial roadways. Table 3.7-14 also indicates the property line noise barrier heights required to achieve compliance with an exterior noise level standard of 60 dB L_{dn}.

The complete inputs and results to the FHWA traffic noise prediction model and barrier calculations are contained in Appendix C of the Noise Study (see Appendix H of this EIR). The modeled noise barriers assume flat site conditions where roadway elevations, base of wall elevations, and building pad elevations are approximately equivalent.

To describe future noise levels due to traffic, FHWA Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used. Direct inputs to the model included traffic volumes provided by Fehr & Peers. The FHWA model is based upon the Calveno reference noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA model was developed to predict hourly L_{eq} values for free-flowing traffic conditions. To predict

L_{dn}/CNEL values, it is necessary to determine the day/night distribution of traffic and adjust the traffic volume input data to yield an equivalent hourly traffic volume.

TABLE 3.7-14: CUMULATIVE + PROJECT TRANSPORTATION NOISE LEVELS AT PROPOSED RESIDENTIAL USES

ROADWAY	APPROXIMATE RESIDENTIAL SETBACK, FEET[1]	ADT	PREDICTED TRAFFIC NOISE LEVELS, DB L_{DN}[2]					
			NO WALL	6' WALL	7' WALL	8' WALL	9' WALL	10' WALL
E. Boronda - Nearest Residential	85	46,700	71	65	64	62	61	60
San Juan Grade Road - Nearest Residential	85	19,500	67	61	60	59	57	56
Russell Road - Nearest Residential	85	13,000	65	59	57	56	55	54
Rogge Road - Nearest Residential	45	5,200	62	55	54	53	52	50
Natividad Road - Nearest Residential	65	30,400	71	64	63	62	61	60

NOTES: ADT = AVERAGE DAILY TRIPS

[1] SETBACK DISTANCES ARE MEASURED IN FEET FROM THE CENTERLINES OF THE ROADWAYS TO THE CENTER OF RESIDENTIAL BACKYARDS.

[2] THE MODELED NOISE BARRIERS ASSUME FLAT SITE CONDITIONS WHERE ROADWAY ELEVATIONS, BASE OF WALL ELEVATIONS, AND BUILDING PAD ELEVATIONS ARE APPROXIMATELY EQUIVALENT. SOUND WALL HEIGHT MAY BE ACHIEVE D THROUGH THE USE A WALL AND EARTHEN BERM TO ACHIEVE THE TOTAL HEIGHT (I.E. 6-FOOT WALL ON 2-FOOT BERM IS EQUIVALENT TO AN 8-FOOT TALL WALL).

SOURCE: FHWA-RD-77-108 WITH INPUTS FROM FEHR & PEERS, AND J.C. BRENNAN & ASSOCIATES, INC. 2016.

Table 3.7-14 data indicate that noise barriers 6- to 8-feet in height would generally be sufficient to achieve compliance with the City of Salinas 60 dB L_{dn} exterior noise level standard for the proposed residential uses. However, for the residential uses located along E. Boronda Road and Natividad Road, sound walls of 6- to 8-feet in height would only reduce exterior noise levels to 62 to 65 dB L_{dn}. While these noise level do not meet the City's preferred 60 dB L_{dn} noise standards, they would comply with the City's conditionally acceptable standard of 60 to 70 dB L_{dn}. Final wall heights should be determined at the discretion of the City. With implementation of the following exterior noise mitigation measures, the proposed project would have a ***less than significant*** impact relative to this environmental topic.

MITIGATION MEASURES

Mitigation Measure 3.7-4: *Six- to ten-foot tall sound walls and/or landscaped berm combinations shall be constructed along the primary Plan Area roadways, adjacent to proposed residential uses, in order to achieve the City's exterior noise standards. At the City's discretion, wall heights which achieve the City's conditionally acceptable 60-70 dB L_{dn} noise standard may be allowed. See the Draft EIR Table 3.7-14 for specific noise barrier heights along each roadway. Noise barrier walls shall be constructed of concrete panels, concrete masonry units, earthen berms, or any combination of these materials. Wood is not recommended due to eventual warping and degradation of acoustical performance. These requirements shall be included in the improvements plans prior to their approval by the City's Public Works Department.*

INTERIOR NOISE IMPACTS

Modern construction typically provides a 25-dB exterior-to-interior noise level reduction with windows closed. Therefore, sensitive receptors exposed to exterior noise of 70 dB L_{dn}, or less, will typically comply with the City of Salinas 45 dB L_{dn} interior noise level standard. Additional noise reduction measures, such as acoustically-rated windows, are generally required for exterior noise levels exceeding 70 dB L_{dn}.

It should be noted that exterior noise levels are typically 2 to 3 dB higher at second floor locations. Additionally, noise barriers do not reduce exterior noise levels at second floor locations. The proposed residential uses are predicted to be exposed to unmitigated first floor exterior transportation noise levels ranging between 62 to 71 dB L_{dn}. Therefore, second floor facades are predicted to be exposed to exterior noise levels of up to 65 to 74 dB L_{dn}.

Based upon a 25-dB exterior-to-interior noise level reduction, interior noise levels are predicted to range between 40 to 49 dB L_{dn}. Predicted interior noise levels would exceed the City's 45 dB L_{dn} interior noise level standard at the first row of residential uses located closest to Boronda Road and Natividad Road. Therefore, additional interior noise control measures would be required for these residential uses. To reduce interior noise levels to 45 dB L_{dn}, or less, it is likely that second floor facades would require windows having a Sound Transmission Class (STC) 35 rating, or higher. Exterior walls would also likely require 3-coat stucco and RC-channels. This would specifically apply to the first row of homes along E. Boronda Road and Natividad Road and would not apply to facades facing away from the roadway.

This analysis assumes that mechanical ventilation will be provided to allow residents to keep doors and windows closed, as desired for acoustical isolation. With implementation of the following interior noise mitigation measures, the proposed project would have a ***less than significant*** impact relative to this environmental topic.

MITIGATION MEASURES

Mitigation Measure 3.7-5: *The first row of residential uses located along E. Boronda Road and Natividad Road shall include windows having a Sound Transmission Class (STC) 35, or higher, rating installed in second floor facades. Exterior walls shall also require 3-coat stucco and RC-channels. The exterior wall specifications would specifically apply to the first row of homes and does not apply to facades facing away from the roadway. A detailed analysis of any additional interior mitigation measures shall be conducted when building plans are available to verify these requirements. These requirements shall be included in the improvements plans prior to approval by the City's Public Works Department.*

Mitigation Measure 3.7-6: *Mechanical ventilation shall be installed in all residential uses to allow residents to keep doors and windows closed, as desired for acoustical isolation. This requirement shall be included in the improvements plans prior to approval by the City's Public Works Department.*

Impact 3.7-5: The proposed project has the potential to expose sensitive receptors to substantial noise from proposed park and school uses (Less than Significant with Mitigation)

Children playing at neighborhood parks or outdoor recreational fields (softball, soccer, basketball, tennis) are often considered potentially significant noise sources which could adversely affect adjacent noise-sensitive land uses. Typical noise levels associated with groups of approximately 50 children playing at 50 feet generally range from 55 to 60 dB L_{eq} and 70 to 75 dB L_{max}. It is expected that park activities would occur during daytime hours. Therefore, noise levels from the playgrounds would need to comply with the City of Salinas exterior noise level standards of 60 dB L_{eq} and 70 dB L_{max} at the nearest residential uses.

Based upon the reference noise level data discussed above, the 60 dB L_{eq} noise contour would be located approximately 50 feet from the center of playgrounds or recreational fields. The 70 dB L_{max} noise contour would extend approximately 90 feet from the center of playground or recreational fields. For residential backyards located less than 90 feet from the center of a playground or recreational field, noise levels may exceed the City of Salinas 70 dB L_{max} exterior noise level standard. In this case, construction of a 6-foot tall masonry sound wall would provide an approximate noise level reduction of 5 dB and would typically reduce noise levels to 60 dB L_{eq} and 70 dB L_{max}, or less.

With implementation of the following exterior mitigation measure, the proposed project would have a ***less than significant*** impact relative to this environmental topic.

MITIGATION MEASURES

Mitigation Measure 3.7-7: *Minimum 6-foot tall sound walls and/or landscaped berms shall be constructed where a park or school site abuts a residential use. No wall shall be required where residential uses are fronted towards a park or school site and separated by a roadway. Noise barrier walls shall be constructed of concrete panels, concrete masonry units, earthen berms, or any combination of these materials. Wood is not recommended due to eventual warping and degradation of acoustical performance. This requirement shall be included in the improvements plans prior to approval by the City's Public Works Department.*

Impact 3.7-6: The proposed project has the potential to expose sensitive receptors to substantial noise from proposed commercial mixed-uses (Less than Significant with Mitigation)

COMMERCIAL AND OFFICE LAND USES

Commercial and office land use activities can produce noise levels which affect adjacent sensitive land uses. These noise sources can be continuous and may contain tonal components which may be annoying to individuals who live in the vicinity. In addition, noise generation from fixed noise sources may vary based upon climatic conditions, time of day, and existing ambient noise levels.

The primary noise sources generally include truck deliveries, trash pickup, parking lot use, and heating, ventilation, and air conditioning (HVAC) equipment operation. These sources may result in noise levels more than the City's standards at nearby receptors.

MECHANICAL EQUIPMENT

HVAC equipment can be a primary noise source associated with commercial mixed uses. These types of equipment are often mounted on roof tops, located on the ground, or located within mechanical rooms. The noise sources can take the form of fans, pumps, air compressors, chillers, or cooling towers. Noise levels from these types of equipment can vary significantly. Noise levels from these types of sources generally range between 45 dB to 70 dB at 50 feet and could exceed City standards at nearby receptors.

MEASURES TO REDUCE NOISE EXPOSURE FROM COMMERCIAL MIXED USES

Use of Setbacks: Noise exposure may be reduced by increasing the distance between the noise source and receiving use. Setbacks can take the form of open space, frontage roads, recreational areas, etc. The available noise attenuation from this technique is limited by the characteristics of the noise source, but is generally 3 to 6 dB per doubling of distance from the source. The rule-of-thumb is that most traffic and railroad noise levels will decrease or increase by approximately 4.5 dB per doubling, or halving of distance, respectively. Noise from point sources, such as HVAC equipment, will generally attenuate at 6 dB per doubling of distance.

Use of Barriers: Noise reduction can be accomplished by placing walls, berms or other structures, such as buildings, between the noise source and the receiver. In addition, intervening topography can be an effective barrier for noise control. The effectiveness of a barrier depends upon blocking line-of-sight between the source and receiver, and is improved with increases in distance the sound must travel to pass over the barrier as compared to a straight line from source to receiver. The difference between the distance over a barrier and a straight line between source and receiver is called the "path length difference," and is the basis for calculating barrier noise reduction.

In general, barriers are most effective when placed close to either the receiver or the source. An intermediate barrier location yields a smaller path length difference for a given increase in barrier height than does a location closer to either source or receiver.

Site Design, Building Locations, and Building Orientations: Buildings can be placed on a project site to shield other structures or areas, to remove them from noise-impacted areas, and to prevent an increase in noise levels caused by reflections. As an example, carports or garages can be used to form or complement a barrier, or shield an outdoor activity area. Placement of outdoor activity areas on the opposite side of the building facades from the noise source, or within the shielded portion of a building complex, such as a central courtyard, can also be an effective method of providing a quiet retreat in an otherwise noisy environment.

CONCLUSION

With implementation of the following exterior mitigation measure, the proposed project would have a ***less than significant*** impact relative to this environmental topic.

MITIGATION MEASURES

Mitigation Measure 3.7-8: *Where commercial, business professional, office, or similar uses abut residential uses or where loading docks or truck circulation routes face residential areas, the following measures shall be included in the Project design:*

- *All HVAC equipment shall be located within mechanical rooms where possible or shielded from view with solid barriers;*
- *Emergency generators shall comply with the City's noise criteria at the nearest noise-sensitive receivers;*
- *Delivery/loading activities shall comply with the City of Salinas Zoning Ordinance standards; and*
- *The applicant shall submit a noise study to verify that the appropriate noise control measures have been incorporated into the project design and will achieve compliance with the City's noise level standards.*

These requirements shall be included in the improvements plans prior to their approval by the City's Public Works Department.

Impact 3.7-7: The proposed project has the potential to expose sensitive receptors to substantial noise from proposed well sites (Less than Significant with Mitigation)

Typical noise levels for well sites at 50 feet are expected to be 60 dB L_{eq}. If a backup generator is present and running, a noise level of 70 dB L_{eq} at 50 feet would be expected. It is expected that wells could operate during daytime or nighttime hours. Long-term operation of the backup generator would only occur under emergency conditions and would therefore not be subject to the City of Salinas exterior noise level standards for Class A noise. However, weekly exercising of the generator may be subject to the City's 60 dB L_{eq} daytime exterior noise level standard at the nearest noise-sensitive residential receptors.

The specific design features of the well sites are not currently known and the associated noise levels cannot be precisely determined at the nearest proposed residential units. Therefore, the well sites should be limited to generating a noise level not exceeding the City's nighttime noise standard of 55 dB L_{eq} at the nearest on-site residential property lines under normal operations. Generators should not exceed the City's daytime noise standard of 60 dB L_{eq}. This will ensure compliance with the City's noise ordinance standards at both on-site and off-site receptors. With implementation of the following exterior mitigation measure, the proposed Project would have a ***less than significant*** impact relative to this environmental topic.

MITIGATION MEASURES

Mitigation Measure 3.7-9: *The well sites shall be designed and built to not exceed a noise level of 55 dB L_{eq} at the nearest residential property line during normal operation of the stations. Generators shall not exceed the City's daytime noise standard of 60 dB L_{eq}. Generators shall be tested only during daytime hours. This requirement shall be included in the improvements plans prior to approval by the City's Public Works Department.*

Impact 3.7-8: Cumulative exposure of existing and future noise-sensitive land uses to increased noise resulting from cumulative development (Cumulatively Considerable and Significant and Unavoidable)

The following tables show the predicted traffic noise level increases on the local roadway network for Cumulative, Cumulative + Project, and Cumulative + Project + CASP conditions. Appendix H of this EIR provides the complete inputs and results of the FHWA traffic noise modeling.

TABLE 3.7-15: CUMULATIVE AND CUMULATIVE PLUS PROJECT TRAFFIC NOISE LEVELS

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		CUMULATIVE	CUMULATIVE + PROJECT	CHANGE	CRITERIA[1]	SIGNIFICANT ?
Constitution Blvd.	South of E. Boronda	62.2	64.7	2.5	+3 dB	No
E. Boronda Rd.	N. Main to San Juan Grade	66.5	67.9	1.3	+1.5 dB	No
E. Boronda Rd.	**San Juan Grade to McKinnon**	**65.3**	**67.7**	**2.4**	**+1.5 dB**	**Yes**
E. Boronda Rd.	McKinnon to El Dorado	64.4	65.9	1.4	+3 dB	No
E. Boronda Rd.	El Dorado to Natividad	64.1	67.0	2.9	+3 dB	No
E. Boronda Rd.	Natividad to Independence	66.6	68.0	1.4	+1.5 dB	No
E. Boronda Rd.	**Independence to Hemmingway**	**65.1**	**66.9**	**1.8**	**+1.5 dB**	**Yes**
E. Boronda Rd.	Hemmingway to Constitution	58.2	59.9	1.7	+5 dB or > 60 dB	No
E. Boronda Rd.	Constitution to N. Sanborn	60.6	63.0	2.4	+3 dB	No
E. Boronda Rd.	**N. Sanborn to Williams**	**59.6**	**62.0**	**2.4**	**+5 dB or > 60 dB**	**Yes**
El Dorado Dr.	South of E. Boronda	54.1	54.9	0.8	+5 dB or > 60 dB	No
Hemmingway Dr.	South of E. Boronda	54.8	54.8	0.0	+5 dB or > 60 dB	No
Independence Blvd.	South of E. Boronda	60.5	60.8	0.3	+3 dB	No
McKinnon St.	South of E. Boronda	63.6	65.2	1.6	+3 dB	No
N. Main	North of E. Boronda	69.7	69.7	0.0	+1.5 dB	No
N. Main	South of E. Boronda	66.8	66.9	0.0	+1.5 dB	No
N. Sanborn Rd.	South of E. Boronda	56.3	58.4	2.1	+5 dB or > 60 dB	No
Natividad Rd.	**South of E. Boronda**	**63.0**	**66.8**	**3.7**	**+3 dB**	**Yes**
Natividad Rd.	**E. Boronda to Future Russell Rd.**	**64.1**	**67.1**	**3.0**	**+3 dB**	**Yes**
Natividad Rd.	Future Russell Rd. to Rogge	64.1	64.3	0.2	+3 dB	No

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		CUMULATIVE	CUMULATIVE + PROJECT	CHANGE	CRITERIA[1]	SIGNIFICANT ?
Natividad Rd.	North of Rogge	62.0	62.3	0.3	+3 dB	No
Old Stage Rd.	North of Future Constitution	59.1	59.1	0.0	+5 dB or > 60 dB	No
Old Stage Rd.	Future Constitution to Williams	58.0	58.0	0.0	+5 dB or > 60 dB	No
Old Stage Rd.	South of Williams	56.2	56.2	0.0	+5 dB or > 60 dB	No
Rogge Rd.	San Juan Grade to Natividad	61.7	61.7	0.0	+3 dB	No
Russell Rd.	West of San Juan Grade	67.5	68.7	1.2	+1.5 dB	No
San Juan Grade Rd.	South of E. Boronda	65.8	66.7	0.8	+1.5 dB	No
San Juan Grade Rd.	E. Boronda to Van Buren	69.3	69.5	0.2	+1.5 dB	No
San Juan Grade Rd.	Van Buren to Russell	69.0	69.3	0.3	+1.5 dB	No
San Juan Grade Rd.	Russell to Rogge	66.0	66.5	0.5	+1.5 dB	No
San Juan Grade Rd.	North of Rogge	63.1	63.8	0.7	+3 dB	No
Van Buren Ave.	West of San Juan Grade	57.3	57.3	0.0	+5 dB or > 60 dB	No
Williams Rd.	West of E. Boronda	64.6	66.2	1.6	+3 dB	No
Williams Rd.	East of E. Boronda	51.7	51.7	0.0	+5 dB or > 60 dB	No

NOTE: [1] WHERE EXISTING NOISE LEVELS ARE LESS THAN 60 DB AN INCREASE OF 5 DB WOULD BE A SIGNIFICANT INCREASE. ADDITIONALLY, ANY INCREASE CAUSING NOISE LEVELS TO EXCEED THE CITY'S NORMALLY ACCEPTABLE 60 DB LDN NOISE LEVEL STANDARD AT AN EXISTING OUTDOOR ACTIVITY AREA OF A RESIDENTIAL USE WOULD ALSO BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 60 DB BUT ARE LESS THAN 65 DB, AN INCREASE OF 3 DB OR MORE WOULD BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 65 DB, AN INCREASE OF 1.5 DB OR MORE WOULD BE SIGNIFICANT. ***BOLD*** *TEXT INDICATES UNACCEPTABLE NOISE INCREASE.*

SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2016.

TABLE 3.7-16: CUMULATIVE AND CUMULATIVE PLUS PROJECT + CASP TRAFFIC NOISE LEVELS

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		CUMULATIVE	CUMULATIVE + PROJECT + CASP	CHANGE	CRITERIA[1]	SIGNIFICANT?
Constitution Blvd.	**South of E. Boronda**	**62.2**	**65.7**	**3.5**	**+3 dB**	**Yes**
E. Boronda Rd.	**N. Main to San Juan Grade**	**66.5**	**68.1**	**1.5**	**+1.5 dB**	**Yes**
E. Boronda Rd.	**San Juan Grade to McKinnon**	**65.3**	**67.9**	**2.6**	**+1.5 dB**	**Yes**
E. Boronda Rd.	McKinnon to El Dorado	64.4	66.1	1.7	+3 dB	No
E. Boronda Rd.	**El Dorado to Natividad**	**64.1**	**67.4**	**3.3**	**+3 dB**	**Yes**
E. Boronda Rd.	**Natividad to Independence**	**66.6**	**69.3**	**2.6**	**+1.5 dB**	**Yes**
E. Boronda Rd.	**Independence to Hemmingway**	**65.1**	**68.6**	**3.5**	**+1.5 dB**	**Yes**
E. Boronda Rd.	**Hemmingway to Constitution**	**58.2**	**61.3**	**3.0**	**+5 dB or > 60 dB**	**Yes**
E. Boronda Rd.	Constitution to N. Sanborn	60.6	63.8	3.2	+3 dB	No
E. Boronda Rd.	**N. Sanborn to Williams**	**59.6**	**62.7**	**3.1**	**+5 dB or**	**Yes**

Roadway	*Segment*	*Noise Levels (L_{DN}, dB) at Nearest Sensitive Receptors*				
		Cumulative	*Cumulative + Project + CASP*	*Change*	*Criteria*[1]	*Significant?*
					> 60 dB	
El Dorado Dr.	South of E. Boronda	54.1	54.9	0.8	+5 dB or > 60 dB	No
Hemmingway Dr.	South of E. Boronda	54.8	58.8	4.0	+5 dB or > 60 dB	No
Independence Blvd.	South of E. Boronda	60.5	62.1	1.6	+3 dB	No
McKinnon St.	South of E. Boronda	63.6	65.3	1.7	+3 dB	No
N. Main	North of E. Boronda	69.7	69.7	0.0	+1.5 dB	No
N. Main	South of E. Boronda	66.8	67.0	0.2	+1.5 dB	No
N. Sanborn Rd.	South of E. Boronda	56.3	58.9	2.6	+5 dB or > 60 dB	No
Natividad Rd.	**South of E. Boronda**	**63.0**	**67.5**	**4.5**	**+3 dB**	**Yes**
Natividad Rd.	**E. Boronda to Future Russell Rd.**	**64.1**	**67.9**	**3.8**	**+3 dB**	**Yes**
Natividad Rd.	Future Russell Rd. to Rogge	64.1	64.9	0.8	+3 dB	No
Natividad Rd.	North of Rogge	62.0	63.0	1.1	+3 dB	No
Old Stage Rd.	North of Future Constitution	59.1	59.8	0.7	+5 dB or > 60 dB	No
Old Stage Rd.	Future Constitution to Williams	58.0	58.7	0.7	+5 dB or > 60 dB	No
Old Stage Rd.	South of Williams	56.2	57.2	1.0	+5 dB or > 60 dB	No
Rogge Rd.	San Juan Grade to Natividad	61.7	61.7	0.0	+3 dB	No
Russell Rd.	**West of San Juan Grade**	**67.5**	**69.4**	**1.9**	**+1.5 dB**	**Yes**
San Juan Grade Rd.	South of E. Boronda	65.8	66.9	1.1	+1.5 dB	No
San Juan Grade Rd.	E. Boronda to Van Buren	69.3	69.5	0.2	+1.5 dB	No
San Juan Grade Rd.	Van Buren to Russell	69.0	69.3	0.3	+1.5 dB	No
San Juan Grade Rd.	Russell to Rogge	66.0	66.5	0.5	+1.5 dB	No
San Juan Grade Rd.	North of Rogge	63.1	63.8	0.7	+3 dB	No
Van Buren Ave.	West of San Juan Grade	57.3	57.3	0.0	+5 dB or > 60 dB	No
Williams Rd.	West of E. Boronda	64.6	66.8	2.2	+3 dB	No
Williams Rd.	East of E. Boronda	51.7	51.8	0.1	+5 dB or > 60 dB	No

Note: [1] Where existing noise levels are less than 60 dB an increase of 5 dB would be a significant increase. Additionally, any increase causing noise levels to exceed the City's Normally Acceptable 60 dB Ldn noise level standard at an existing outdoor activity area of a residential use would also be significant. Where existing noise levels exceed 60 dB but are less than 65 dB, an increase of 3 dB or more would be significant. Where existing noise levels exceed 65 dB, an increase of 1.5 dB or more would be significant. ***Bold*** *text indicates unacceptable noise increase.*

Source: J.C. Brennan & Associates, Inc. 2016.

As shown in the above tables, some noise-sensitive receptors located along the Plan Area roadways are currently exposed to exterior traffic noise levels exceeding the City of Salinas 60 dB

L_{dn} exterior noise level standard for residential uses. These receptors would continue to experience elevated exterior noise levels with implementation of the proposed project.

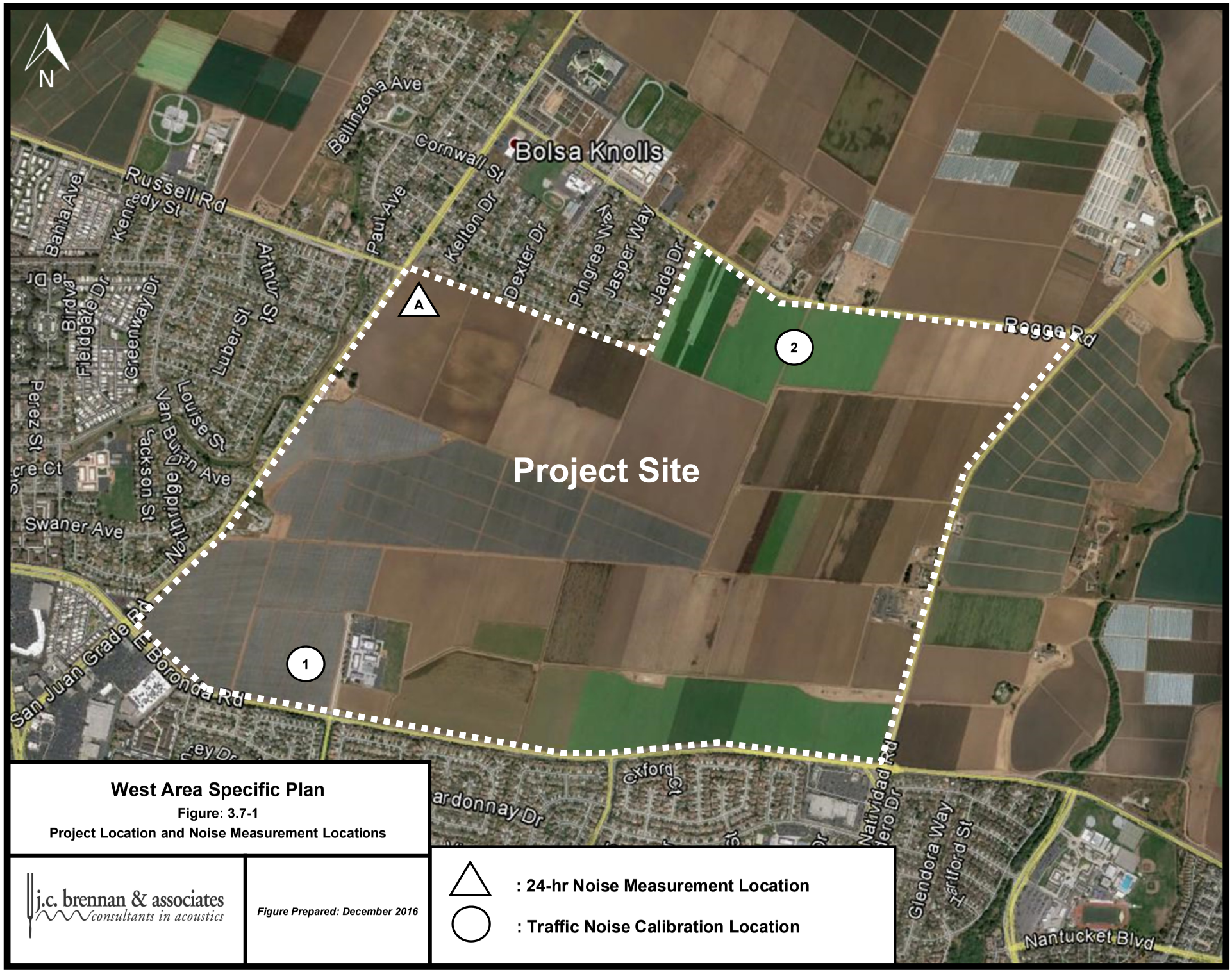
In some locations, the proposed project is predicted to cause increases in traffic noise levels which would trigger a new exceedance of the City of Salinas' 60 dB L_{dn} exterior noise level standard at sensitive receptor locations, or exceed the FICON allowable increase criteria outlined in Table 3.7-7. The greatest number of significant traffic noise increases would occur under the Cumulative + Project + CASP traffic condition.

Significant traffic noise increases under the Cumulative + Project + CASP traffic condition include the following:

- Constitution Blvd., South of E. Boronda – noise levels are predicted to increase by 3.5 dB from 62.2 dB to 65.7 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Main to San Juan Grade – noise levels are predicted to increase by 1.5 dB from 66.5 dB to 68.1 dB L_{dn}. This would equal the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, San Juan Grade to McKinnon – noise levels are predicted to increase by 2.6 dB from 65.3 dB to 67.9 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, El Dorado to Natividad – noise levels are predicted to increase by 3.3 dB from 64.1 dB to 66.1 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Natividad to Independence – noise levels are predicted to increase by 2.6 dB from 66.6 dB to 69.3 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Independence to Hemmingway – noise levels are predicted to increase by 3.5 dB from 65.1 dB to 68.6 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Hemmingway to Constitution – noise levels are predicted to increase by 3.0 dB from 58.2 dB to 61.3 dB L_{dn}. This would not exceed the FICON criteria of 5 dB where existing noise levels are less than 60 dB, as outlined in Table 3.7-7, but would cause a new exceedance of the City's 60 dB L_{dn} exterior noise level standard at outdoor activity areas of the nearest residential receptors.
- E. Boronda Road, N. Sanborn to Williams – noise levels are predicted to increase by 3.1 dB from 59.6 dB to 62.7dB L_{dn}. This would not exceed the FICON criteria of 5 dB where existing noise levels are less than 60 dB, as outlined in Table 3.7-7, but would cause a new exceedance of the City's 60 dB L_{dn} exterior noise level standard at outdoor activity areas of the nearest residential receptors.
- Natividad Road., South of E. Boronda – noise levels are predicted to increase by 4.5 dB from 63.0 dB to 67.5 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7.

- Natividad Road., E. Boronda to Future Russell Road – noise levels are predicted to increase by 3.8 dB from 63.0 dB to 67.5 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7. However, it should be noted that this roadway segment is located between the WASP and CASP projects and future sensitive receptors along this roadway would be constructed with noise control measures designed to achieve compliance with the City of Salinas exterior and interior noise level standards.
- Russell Road, West of San Juan Grade – noise levels are predicted to increase by 1.9 dB from 67.5 dB to 69.4 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.

The proposed project would cause increased noise levels exceeding the City of Salinas 60 dB L_{dn} exterior noise level standard at existing residential receptors. Therefore, there would be a cumulative exposure of existing and future noise-sensitive land uses to increased noise resulting from cumulative development. As such, implementation of the WASP would have a ***cumulatively considerable contribution*** and ***significant and unavoidable*** impact to noise.



West Area Specific Plan

Figure: 3.7-1

Project Location and Noise Measurement Locations

j.c. brennan & associates
consultants in acoustics

Figure Prepared: December 2016

This page left intentionally blank.

The purpose of this EIR section is to identify the existing population and housing conditions within the city and proposed by the project, analyze the project's consistency with relevant planning documents and policies, and recommend mitigation measures to avoid or minimize any potential impacts. Information in this section is based on information provided by the project applicant and contained within the West Area Specific Plan submitted to the City of Salinas, and the following reference materials:

- *City of Salinas General Plan (adopted September 17, 2002, as Amended through 2015),*
- *City of Salinas Housing Element (adopted December 15, 2015)*
- *City of Salinas Municipal Code (Chapter 37 Zoning),*
- *US Census data,*
- *California Department of Finance population and housing estimates (E-5 reports), and*
- *AMBAG 2014 Regional Growth Forecast.*

No comments were received during the NOP review period regarding environmental impacts associated with population or housing.

3.8.1 ENVIRONMENTAL SETTING

EXISTING PHYSICAL ENVIRONMENT

Salinas is located in northern Monterey County, within the Salinas Valley between the Gabilan and Santa Lucia mountain ranges. Salinas is situated approximately 20 miles northeast of the City of Monterey and 60 miles south of San Jose. Salinas is located close to regional transportation routes, including U.S. Highway 101 (U.S. 101), State Routes 68 and 183, and the Union Pacific Railroad line.

Project Site

In 2006, the City of Salinas began the process of amending its Sphere of Influence to include an area designated as Future Growth Areas (FGAs). The Specific Plan Area is located within the designated FGA. The process included a Sphere of Influence (SOI) update, a Supplemental EIR for the General Plan EIR, and an application for annexation. The application was submitted to the Monterey County Local Agency Formation Commission (LAFCO) in December 2007. LAFCO approved the application on May 19, 2008, and the FGAs (including the Specific Plan Area) was made part of the incorporated City of Salinas.

The Specific Plan Area includes roughly 797 acres within the incorporated Salinas city limits and is bounded by San Juan Grade Road on the west, Boronda Road on the south, Natividad Road on the east, and Rogge Road and the future extension of Russell Road on the north. Gabilan Creek is located east of the Specific Plan Area, while U.S. 101 and Main Street are located to the west.

The majority of the Specific Plan Area is currently under agricultural production. Most agricultural activity on-site and in the immediate vicinity has consisted of various types of vegetable crops.

The Specific Plan Area currently contains limited development. McKinnon Elementary School is an existing school located in the southern portion of the Specific Plan Area, near the intersection of Boronda Road and McKinnon Street. This school, which is part of the Santa Rita Elementary School District, provides a K through 5th education to students in the north Salinas area. A few residences and farm structures are clustered within the eastern portion of the Specific Plan Area, adjacent to Natividad Road. Other residences with accessory farm structures are in the northern portion, adjacent to Rogge Road, and in the western portion near the intersection of San Juan Grade Road and Boronda Road.

Existing Surrounding Land Uses

North of the Specific Plan Area is the Bolsa Knolls residential area is located on the northeastern corner of the intersection of Russell Road and San Juan Grade Road. Bolsa Knolls is an unincorporated area within Monterey County that is immediately adjacent to the City's northern boundaries and has a mixture of residential subdivisions along San Juan Grade Road. Scattered residences are also located along Rogge Road to the north in the unincorporated area of Monterey County. Beyond this residential area is a mix of agricultural land, rural residences, and the Salinas Golf and Country Club.

Land east of the Specific Plan Area is also designated as part of the FGA in the Salinas General Plan. This area is known as the Central Area. Although it is currently used primarily for agricultural production, a specific plan for the Central Area is being prepared that proposes a mix of urban land uses, similar to that proposed for the West Area Specific Plan (WASP).

South of the Specific Plan Area, across Boronda Road, is the Harden Ranch Specific Plan. This portion of the city is primarily a residential area. Most of the residences are of the type associated with low density residential designations, mainly single-family homes. However, some medium density and high density (apartment) units are located in this area as well. Extensive commercial development is located southwest of the Specific Plan Area, along Main Street and U.S. 101. This is the location of some of the major retail centers in Salinas, including the Northridge Shopping Center, Harden Ranch Plaza, Westridge, Boronda Crossing, and the Salinas Auto Center.

West of the Specific Plan Area are residential areas with a mix of low density and medium density units. Also located to the west is Santa Rita Elementary School. To the northwest, north of Russell Road, is the Rancho San Juan Specific Plan Area, covering approximately 2,581 acres in the unincorporated area of Monterey County. The specific plan for the portion of Rancho San Juan (now known as Butterfly Village) proposes a mix of residential, commercial, industrial, and open space uses.

Surrounding land uses are shown in Section 2.0: Figure 2-3.

Existing General Plan Land Uses

The Specific Plan Area is currently designated by the Salinas General Plan and General Plan Land Use Map as an FGA. The North of Boronda FGA (which includes the West Area Specific Plan) was formally annexed to the incorporated City of Salinas on September 8, 2008. General Plan Land Use Implementation Program LU-4 requires the preparation of Specific Plans prior to development of any portion of the FGAs. Additionally, Housing Policy H-1.1 1 ensure that each Specific Plan within the FGAs includes a range of housing types by requiring new residential developments of over 1,000 units to include a mix of low-density, medium density, and high-density units. From 15%-25% of the housing units in such developments shall fall within the density range of 16-24 units per net residential development acre, and 35%-45% of the housing units shall fall within the density range of 7-14 units per net residential developable acre.

Existing Zoning

The North of Boronda FGA (which includes the Specific Plan Area) was formally annexed to the incorporated City of Salinas on September 8, 2008 and zoned New Urbanism Interim (NI) with a Specific Plan Overlay District.

The New Urbanism districts are intended to guide the development of the City's FGAs. However, The Overlay requires that a Specific Plan be approved by the City prior to the development of any land located in the FGA. As such, the approved Specific Plan will ultimately regulate the development in the FGA.

HOUSING AND DEMOGRAPHICS

Population Trends

According to the Department of Finance (DOF) population estimates, the city of Salinas had a population of 154,720 in 2015. The City experienced a population increase of 33,908 persons (31.2%) from 1990 to 2000. During the period from 2000 to 2010, population continued to increase but at a slower rate (5.4%) as compared to the previous decade.

The Association of Monterey Bay Area Governments (AMBAG) 2014 Regional Growth Forecast, estimates a similar growth rate within Salinas over the next several decades (4.2% from 2010 to 2020, and 6.5% from 2020 to 2030). Population trends and growth forecast are shown below in Table 3.8-1.

TABLE 3.8-1: POPULATION GROWTH AND GROWTH FORECAST

YEAR	POPULATION	CHANGE	PERCENT CHANGE
1990	108,777	--	--
2000	142,685	33,908	31.2%
2010	150,441	7,756	5.4%
2015	154,720	4,279	2.8%
GROWTH FORECAST			
2020	156,793	6,352	4.2%
2030	166,912	10,119	6.5%
2035	172,499	5,587	3.4%

SOURCES: CALIFORNIA DEPARTMENT OF FINANCE, 1850-2010 HISTORICAL US CENSUS POPULATIONS OF COUNTIES AND INCORPORATED CITIES/TOWNS IN CALIFORNIA, AND AMBAG 2014 REGIONAL GROWTH FORECAST

Housing Stock

Table 3.8-2 summarizes the growth of the City's housing stock between 2000 and 2015. As shown in Table 3.8-2, the number of housing units increased from 39,659 in 2000 to 42,651 in 2010, representing 7.5 percent growth in the City's housing stock. During the past five years housing stock increases were smaller than the previous 10 years. The City's housing stock totaled 43,001 housing units in 2015 representing 0.8 percent growth from 2010 to 2015.

TABLE 3.8-2: HOUSING UNIT GROWTH

YEAR	HOUSING UNITS	CHANGE	PERCENT CHANGE
2000	39,659	--	--
2010	42,651	2,992	7.5%
2015	43,001	350	0.8%

SOURCES: CENSUS BUREAU 2000 AND 2010 CENSUS; STATE DEPARTMENT OF FINANCE, HOUSING ESTIMATES, 2011-2017.

Persons Per Dwelling Unit

According the most recent U.S. Census (2010) the average number of persons residing in a dwelling unit in the City of Salinas was 3.66.

3.8.2 REGULATORY SETTING

STATE

Government Code

California Government Code Section 65300 et seq. establishes the obligation of cities and counties to adopt and implement general plans. The general plan is a comprehensive, long-term, and general document that describes plans for the physical development of a jurisdiction and of any land outside its boundaries that, in the jurisdiction's judgment, bears relation to its planning. The general plan addresses a broad range of topics, including, at a minimum, land use, circulation, housing, conservation, open space, noise, and safety. In addressing these topics, the general plan identifies the goals, objectives, policies, principles, standards, and plan proposals that support the jurisdiction's vision for the area. The general plan is a long-range document that typically addresses the physical character of an area over a 20-year (or longer) period. Although the general

plan serves as a blueprint for future development and identifies the overall vision for the planning area, it remains general enough to allow for flexibility in the approach taken to achieve the plan's goals.

The State Zoning Law (California Government Code Section 65800 et seq.) establishes that zoning ordinances, which are laws that define allowable land uses within a specific district, are required to be consistent with the general plan and any applicable specific plans. When amendments to the general plan are made, corresponding changes in the zoning ordinance may be required within a reasonable time to ensure the land uses designated in the general plan would also be allowable by the zoning ordinance (Government Code, Section 65860, subd. [c]).

Regional Housing Needs Plan

California General Plan law requires each city and county to have land zoned to accommodate a fair share of the regional housing need. The share is known as the Regional Housing Needs Allocation (RHNA) and is based on a Regional Housing Needs Plan (RHNP) developed by councils of government. AMBAG is the lead agency for developing the RHNP for a three-county area that includes Monterey, Santa Cruz and San Benito counties. AMBAG is responsible for allocating housing needs to each jurisdiction in its region. A local jurisdiction's share of regional housing need is the number of additional housing units needed to accommodate the forecasted growth in the number of households, to replace expected demolitions and conversion of housing units to non-housing uses, and to achieve a future vacancy rate that allows for healthy functioning of the housing market. The allocation is divided into the four income categories: Very Low, Low, Moderate, and Above Moderate. The allocation is further adjusted to avoid an over-concentration of lower income households in any one jurisdiction.

The latest housing allocation for the City of Salinas covers the period from 2014 to 2023 and consists of 2,229 units (269 extremely low, 269 very low, 350 low, 406 moderate, and 935 above moderate income). The City is not required to make development occur; however, the City must facilitate housing production by ensuring that land is available and that unnecessary development constraints have been removed. The City has prepared and adopted an updated Housing Element (2015-2023) to cover the 2014-2023 regional housing needs cycle in accordance with State law.

LOCAL

City of Salinas General Plan (Salinas GP)

As noted above, General Plans are prepared under a mandate from the State of California, which requires each city and county to prepare and adopt a comprehensive, long-term general plan for its jurisdiction and any adjacent related lands. State law requires General Plans to address seven mandated components: circulation, conservation, housing, land use, noise, open space, and safety. In addition to those components required by State law, the Salinas GP also contains optional elements, including Community Design, and is in the process of developing and adopting an Economic Development Element.

The General Plan functions as a "constitution" for the City of Salinas and reflects the long-range aspirations of physical form and amenity and provides guidance to the substance of developmental regulations and other programs of the City Council.

General Plan Land Use Map: The General Plan Land Use Map portrays the ultimate uses of land in the City of Salinas through land use designations. The General Plan Land Use Map depicts the Specific Plan Area as an FGA. The General Plan identified FGAs as portions of the city where future urban development will be directed. FGAs are established as a part of the General Plan maps, and include the Specific Plan Area, as well as other nearby areas. The General Plan provides development guidance such that these FGAs are developed as urban neighborhoods using the principles of New Urbanism.

City of Salinas General Plan Policies: General Plan policies associated with specific environmental topics (aesthetics, air quality, agriculture, biological resources, cultural resources, geology/soils/mineral resources, hazards, hydrology/water quality, noise, public services/recreation, transportation, utilities, etc.) are discussed in the relevant sections of this EIR. General Plan policies applicable to population and housing that are directly relevant to the proposed project are summarized below.

Land Use Element:

Policy LU-2.1: Minimize disruption of agriculture by maintaining a compact city form and directing urban expansion to the North and East, away from the most productive agricultural land.

Policy LU-2.3: Encourage clustering of development on sites within the Future Growth Area to minimize impacts on agricultural and open space resources.

Housing Element:

Policy H-1.1: Encourage a variety of housing types, designs, and prices throughout the city to maintain housing choice and enable households of all types and income levels the opportunity to find suitable ownership or rental housing.

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.

Policy H-1.3: Identify adequate sites to facilitate and encourage housing production for the existing and projected housing needs of the City.

Policy H-1.4: Support the concept of "aging in place" by providing a range of housing types and tenure that allows people to remain in the community as their housing needs change.

Policy H-1.5: Encourage the geographic dispersal of units affordable to very-low, low- and moderate-income households throughout the City.

Policy H-1.6: Ensure that new residential development and reuse/revitalization projects are compatible with surrounding neighborhoods.

Policy H-1.7: Reduce municipal constraints to the production, maintenance, and development of decent, safe housing.

Policy H-1.8: Encourage the development of higher density apartments, townhouses and condominiums served by major transit corridors or other non-automotive transport.

Policy H-1.9: Promote collaborative regional efforts to address housing issues such as the proximity of commercial development to employee housing and the tax framework that favors other developments over housing.

Policy H-1.10: Promote the development of neighborhoods, or sub- communities, designed to encourage pedestrian and mass transit by offering employment or services for the daily needs of residents, while reducing the need for autos.

Policy H-1.1 1: In Future Growth Areas, ensure that each Specific Plan includes a range of housing types by requiring new residential developments of over 1,000 units to include a mix of low-density, medium density, and high-density units. From 15%-25% of the housing units in such developments shall fall within the density range of 16-24 units per net residential development acre, and 35%-45% of the housing units shall fall within the density range of 7-14 units per net residential developable acre.

Policy H-1. 12: In Future Growth Areas, promote mixed use development to increase housing opportunities by requiring commercial and professional office development to incorporate housing opportunities on site. The City Council may make a finding that it would be inappropriate to require on-site housing in a proposed new commercial or professional office development, and in that case shall require equivalent housing to be constructed at an off-site location. Existing commercial and professional office development shall be encouraged to redevelop and reconfigure uses to incorporate new housing opportunities.

Policy H-2.1: Maintain the quality of owner-occupied and rental housing through adoption and enforcement of housing and property maintenance standards.

Policy H-2.2: Promote the repair, improvement and rehabilitation of housing to enhance the quality of life in neighborhoods and promote community

identity and pride.

Policy H-2.3: Encourage the preservation and restoration of residential resources that possess historic or architectural value.

Policy H-2.4: Through public-private partnerships and collaborative efforts, rehabilitate substandard housing where feasible.

Policy H-2.5: Continue to provide units for very-low and low-income households through the City's inclusionary requirements and other programs.

Policy H-2.6: Encourage the retention, rehabilitation and new construction of high-density, well-designed housing in the Central City and other targeted areas, as discussed in the Land Use and Community Design Elements.

Policy H-2.7: Ensure new residential developments are compatible (i.e., scale, size, design and appearance) with surrounding uses.

Policy H-2.8: Support public education programs that promote property maintenance and energy conservation.

Policy H-2.9: Encourage and support the redevelopment and reuse of existing developed portions of the City that are presently underutilized, without sacrificing history or quality of life.

Policy H-3.1: Assist in the production and conservation of housing affordable to very low-, low- and moderate-income households, with a focus on the need for housing for the local workforce and workers essential to our community.

Policy H-3.2: Continue to encourage the development of affordable-housing units with three or more bedrooms (unless the affordable units are part of a mixed-use development).

Policy H-3.3: Encourage and support the development of senior housing and assisted living facilities on sites where proximity to services and other features make it desirable.

Policy H-3.4: Encourage the provis10n of housing that is decent, safe, and attractive for agricultural workers and other special needs groups.

Policy H-3.5: Encourage the provision of housing and services for homeless individuals and families through the use of state and federal programs and through public-private partnerships and local collaborative efforts.

Policy H-3.6: Work to ensure that individuals and families seeking housing in Salinas are not discriminated against on the basis of sex, family structure, race, ethnicity, national origin, religion or other arbitrary factors.

Policy H-3.7: Facilitate the development of affordable housing through regulatory

incentives, density bonuses, inclusionary housing, and financial assistance.

Policy H-3.8: Encourage the use of federal tax credits and mortgage revenue bonds to provide affordable housing.

Policy H-3.9: Support collaborative partnerships of nonprofit organizations, affordable housing developers, major employers and for profit developers to support the production of affordable housing for those working in the Salinas Area.

Policy H-3.10: Support efforts for the development of affordable housing and agricultural worker housing at the former Fort Ord and other appropriate locations.

Policy H-3. 11: Support the provision and development of housing affordable to lower income persons with disabilities.

Salinas Municipal Code, Chapter 37 - Zoning

The purpose of Chapter 37, Zoning, of the City's Municipal Code is to protect and promote public health, safety, peace, comfort, convenience, prosperity, and general welfare and to regulate land use and development in accordance with the Salinas GP.

Approval for land use or development of a site within a General Plan designed FGA is preceded by or made concurrent with the adoption of a specific plan for that site. Specific plans located in the FGA are be subject to the regulations in Article III, Division 8: New Urbanism Districts (Sec. 37-40.110. - Future growth area. Sec. 37-40.110. - Future growth area (Ord. No. 2463 (NCS).)

The Specific Plan is intended to serve a planning and regulatory function. Any matter or issue not specifically covered by the Specific Plan is subject to the regulations and procedures of the Salinas Zoning Code (Sec. 37-30.450. b- Development Regulations). In the case of a conflict between the Specific Plan and the Zoning Code, the Specific Plan shall apply *(Sec. 37-40.120. – Conflict between regulations:*

> *"Where a conflict occurs between the specific plan overlay district and the base district or any other section of the Code, the specific plan overlay district regulations shall prevail.").*

Zoning Map: The Zoning Map identifies zoning districts within the city at the parcel level. The Zoning Map designates the Specific Plan Area as New Urbanism Interim (NI). The purpose of the NI zoning district is to provide a transitional zone for the FGAs of the city located north of East Boronda Road. This includes the Specific Plan Area, as well as other areas that are within the city limits and are subject to the preparation of specific plans and subsequent subdivision maps. The New Urbanism zoning district promotes the principles of New Urbanism and the creation of distinct identifiable neighborhoods that have Traditional Neighborhood Development (TND) characteristics as expressed in the Salinas General Plan.

3.8.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on population and housing if it will:

- 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);
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; and/or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

The potential for the proposed project to displace substantial numbers of people, or housing necessitating the construction of replacement housing elsewhere was found to be less than significant during the Initial Study process. Therefore, this topic does not warrant additional analysis and will not be addressed further this EIR section. The Initial Study and NOP is available in Appendix A.

IMPACTS AND MITIGATION MEASURES

Impact 3.8-1: The proposed Project has the potential to induce substantial population growth in an area (Less than Significant)

BACKGROUND

Section 15126.2(d) of the CEQA Guidelines requires that an EIR evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by the CEQA Guidelines as:

> *The way in which a proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth…It is not assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment.*

Based on the CEQA Guidelines, growth inducement is any growth that exceeds planned growth of an area and results in new development that would not have taken place without implementation of the project. A project can have direct and/or indirect growth inducement potential. Direct growth inducement would result if a project, for example, involved construction of new housing. A project would have indirect growth inducement potential if it established substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises) or if it would involve a construction effort with substantial short-term employment opportunities

that would indirectly stimulate the need for additional housing and services to support the new employment demand (*Napa Citizens for Honest Government v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342). Similarly, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. A project providing an increased water supply or wastewater treatment/collection in an area where this service historically limited growth could be considered growth-inducing.

The State CEQA Guidelines further explain that the environmental effects of induced growth are considered indirect impacts of the proposed action. These indirect impacts or secondary effects of growth may result in significant, adverse environmental impacts. Potential secondary effects of growth include increased demand on other community and public services and infrastructure, increased traffic and noise, and adverse environmental impacts such as degradation of air and water quality, degradation or loss of plant and animal habitat, and conversion of agricultural and open space land to developed uses.

Growth inducement may constitute an adverse impact if the growth is not consistent with or accommodated by the land use plans, growth management plans and policies for the area affected. Local land use plans provide for land use development patterns and growth policies that allow for the orderly expansion of urban development supported by adequate urban public services, such as water supply, roadway infrastructure, sewer service, and solid waste service.

Components of Growth: The timing, magnitude, and location of land development and population growth in a region are based on various interrelated land use and economic variables. Key variables include regional economic trends, market demand for residential and non-residential uses, land availability and cost, the availability and quality of transportation facilities and public services, proximity to employment centers, the supply and cost of housing, and regulatory policies or conditions. Since the general plan of a community defines the location, type, and intensity of growth, it is the primary means of regulating development and growth in California.

GROWTH EFFECTS OF THE PROPOSED PROJECT

Direct Population Growth: The WASP proposes development on the 797-acre Specific Plan Area including housing units that would result in direct population growth. The project includes a maximum of 4,340 total residential units. The addition of 4,340 housing units at full buildout has the potential to increase the population of the city by an estimated 15,884 persons.[1]

The Salinas General Plan (2002) and General Plan Program EIR analyzed impacts to population and housing and found that future development resulting from implementation of the General Plan

[1] 3.66 persons per household Source: 2010 U.S. Census

had the potential to result in a significant, but mitigable impact related to substantial population and housing unit growth over existing conditions.

The 2002 General Plan identifies growth within the FGAs (which includes the Specific Plan Area). The Salinas General Plan Land Use Table LU-3 identifies the development capacity of the FGAs. This includes 15,873 residential units, resulting in an additional population of 58,253 within the city's FGAs. The proposed WASP development proposes 4,340 units with the potential to increase the population of the city by an estimated 15,884 persons, which is within the projections identified in the Salinas General Plan.

Additionally, the General Plan identified FGAs as portions of the city where future urban development will be directed. FGAs are established as a part of the General Plan maps, and include the Specific Plan Area, as well as other nearby areas. The General Plan provides development guidance within these FGAs so that they are developed as urban neighborhoods using the principles of New Urbanism. The principles of new urbanist design are further detailed in the city's municipal code Chapter 37 Zoning. The Specific Plan Area is currently designated New Urbanism Interim (NI) by the city's zoning map**.** The purpose of the NI zoning district is to provide a transitional zone for the FGAs of the city located north of East Boronda Road (including the Specific Plan Area) that are within the city limits and are subject to the preparation of specific plans and subsequent subdivision maps.

The New Urbanism Districts promote the principles of New Urbanism and the creation of distinct identifiable neighborhoods that have Traditional Neighborhood Development (TND) characteristics as expressed in the Salinas General Plan and are intended to guide the development of the City's FGA. The FGA is also subject to a Specific Plan Overlay District. The Overlay requires that a Specific Plan be approved by the City prior to the development of any land located in the FGA. As such, an approved Specific Plan will ultimately regulate the development in the FGA. The New Urbanism districts identified in the city's zoning code and proposed for WASP project are as follows:

Neighborhood Edge/Low Density Residential (NE): The purpose of the NE zoning district is to provide areas for predominately detached single-family dwellings, together with other dwelling types at the minimum average density to be not less than six dwelling units per net residential acre and the maximum average density is not more than eight dwelling units per net residential acre without a density bonus.

Neighborhood General 1/Medium Density Residential (NG-1): The purpose of the NG-1 zoning district is to provide areas for a diverse range of low, medium, and high density dwellings such as detached single-family dwelling units on large and small lots, row houses, green courts, duplexes, cottages, and attached multi-family dwelling units where the minimum average density within this district is not less than nine dwelling units per net residential acre and the maximum average density is not more than fifteen dwelling units per net residential acre without a density bonus.

Neighborhood General 2/High Density Residential (NG-2), The purpose of the NG-2 zoning district is to provide areas for medium and high-density dwellings such as lane homes, green courts,

cottages, row houses, and multi-family dwelling units where the minimum average density is not less than sixteen dwelling units per net residential acre and the maximum average density is not more than twenty-four dwelling units per net residential acre without density bonus.

Village Center (VC), The purpose of the VC zoning district is to provide areas for mixed use, stand-alone retail and office uses, flex use, high density residential, and public and semipublic facilities generally sited along a "Main Street" or around a village square where the maximum dwelling units per acre is twenty-four dwelling units per net acre without density bonus and the maximum floor area ratio is 1.0. General Plan provisions allow for a conversion of allowable commercial floor area to residential units at a ratio of one unit per 1,000 square feet of floor area.

The proposed Project development is within the development types and intensities identified in the General Plan and its associated Final Program EIR, the Project does not change limits, amount, type, or intensity of development allowed in the Project area beyond what was analyzed in the certified Final Program EIR for the General Plan. While there will be new growth, no new or increased significant population and housing impacts beyond those identified and analyzed in the Final Program EIR would occur.

Indirect Population Growth: As described above, projects that include employment generating uses have the potential to result in indirect population growth through the creation of jobs or the extension of infrastructure into areas that were not previously served.

Implementation of the WASP would provide job growth to the area and include a maximum of 571,500 square feet of commercial space. The Salinas General Plan designates land uses to ensure a balance between new residential development and jobs-creating uses. Within the FGAs (including the Specific Plan Area) the General Plan assumes a development capacity that includes 178,000 square feet of retail space, 30,000 square feet of office space, 599,000 square feet of general commercial space, and 2,613,000 square feet of mixed use area (Salinas General Plan pg. LU 37: Land Use Element Table LU-3 Development capacity for FGAs). The proposed maximum 571,500 square feet developable by the proposed project is within the development capacities stated in the Salinas General Plan.

It is anticipated that local employment would be increased to provide administrative, management, and retail services. The proposed project is expected to require both full-time and part-time employees. It is anticipated that the employment growth would be met both by existing residents and through the attraction of new residents. Data from U.S. Bureau of Labor Statistics (2016) indicates that the city has an unemployment rate of 8%, which is higher than state and national averages at 6.3% and 4.9 % respectively. Many of the newly created jobs are expected to be in the retail/commercial sector and would be opportunities well-suited for second wage earners in households, the younger workforce, and others, which generally depends on the local workforce. Due to the fact there is currently a surplus of unemployed workforce within the city, it is likely that current residents would fill the majority of new positions. Additional population

growth induced by the creation of new businesses could be supported by the available housing within Salinas as well as new housing planned as part of the WASP.

The construction of new developments within the Specific Plan Area would increase temporary construction jobs in the area. As buildout of the project is expected to occur gradually as it responds to market demand, construction related employment would be similarly dispersed over time. Local construction companies are likely to find ample pools of employable personnel in the Salinas area, based on the current and projected employment trends. Due to the fact there is currently a surplus of unemployed workforce within the city, it is likely that area residents would fill the majority of these temporary construction positions.

CONCLUSION

Development of the FGAs is a component of the city's planned long-term growth as identified in the General Plan. Infrastructure needed to support development of the site and the FGAs, and the subsequent population, housing and employment increases expected through implementation of the WASP has already been planned and evaluated at the General Plan level. Therefore, development of the site will not induce growth in the Specific Plan Area or adjacent undeveloped parcels that has not already been accounted for in the General Plan and evaluated in the Final General Plan EIR.

The Final General Plan EIR did, however, identify significant impacts to population and housing as a result of implementation of the General Plan; because the proposed project is consistent with the development assumed under the General Plan, the significant impacts to population/housing resulting from implementation of the Project would be the same as those identified by the Final Program EIR. Mitigation measures were identified in the Final Program EIR that would reduce population and housing impacts created by implementing the General Plan, and these mitigation measures would continue to apply to implementation of the proposed project. A summary of mitigation measure provided in the City of Salinas General Plan FEIR are described below:

- **PH1.** The City will implement Implementation Program HE-2, which requires the City to continue to work with the Local Agency Formation Commission to ensure that sufficient land, infrastructure, and services are available to support housing development.

- **PH2.** The City will implement Implementation Program LU-12, which requires the City to review the level of services and funding levels at budget time, adjusting when necessary to ensure that adequate levels of service are provided and facilities are maintained.

- **PH3.** The City will implement Implementation Program C-3, which requires the City to continue to update on an annual basis the Capital Improvement Plan to plan for and fund future improvements to the circulation system, as well as other public facilities, including improvements to the existing pedestrian and bicycle system, within the community.

- **PH4.** The City will implement Implementation Program COS-9, which requires the City to continue to cooperate with the County of Monterey to implement the Boronda

Memorandum of Understanding, which directs that City growth occur generally to the north and east from the most productive farmland.

- **PH5.** The City will implement Implementation Program COS-29, which requires the City to promote retrofit programs by the City to reduce energy usage and consequently reduce emissions from energy consumption. Encourage utility companies to provide informational literature about available retrofit programs at City offices, the Permit Center, and libraries.

- **PH6**. The City will implement Implementation Program CD-11, which requires the City to use the Smart Growth Network's Getting to Smart Growth: 100 Policies for Implementation (ICMA, 2002) or other similar policy manual, perform an "audit" of the City's Zoning and Subdivision Ordinances to identify potential impediments to the development of smart growth and traditional neighborhood development projects. Revise, adopt, and implement new standards and procedures as necessary to encourage smart growth and traditional neighborhood development in Salinas.

- **PH7.** The City will implement Implementation Program COS-23, which requires the City to continue to cooperate with the Monterey Bay Unified Air Pollution Control District to implement the most recent Air Quality Management plan to address regional motor vehicle emissions. In particular, coordinate with the District and AMBAG, providing technical assistance and demographic data when available, during the development of future population projections by AMBAG.

While the proposed project will result in growth within the city, it is not anticipated to significantly induce growth beyond what is anticipated because growth in the Specific Plan Area has been accounted for the General Plan and subsequent General Plan EIR, and Supplemental EIR. Thus, Implementation of the proposed Project will have a ***less than significant*** impact relative to this topic.

Impact 3.8-2: Cumulative impact on the potential to induce substantial population growth in an area (Less than Significant and Less than Cumulatively Considerable)

Continued development in Salinas and Monterey County will result in housing unit and population increases in the region. Future development according to the land uses identified in the Salinas General Plan will result in a population growth of approximately 69,300 people in the City between the years of 2000 and buildout of the General Plan. Based on the growth projected to occur in the planning area, the General Plan FEIR concluded a potentially significant impact associated with substantial growth is anticipated. However, the General Plan FEIR concluded that implementation of the mitigation measures contained in the FEIR would reduce the population and housing impacts created by implementation of the General Plan to a less than significant level. As discussed within Section 3.8: Population and Housing (under impact 3.8-1), mitigation measures identified in the General Plan FEIR would continue to apply to the implementation of the proposed project.

Development of the FGAs is a component of the city's planned long-term growth as identified in the city's General Plan. Infrastructure needed to support development of the site and the FGAs, and the subsequent population, housing and employment increases expected through implementation of the WASP, have already been planned and evaluated. Additionally, all lands within the General Plan jurisdiction have been planned to accommodate growth within the city have been evaluated in the General Plan FEIR. The proposed project does not change the intent, intensities, or densities of land uses identified within the General Plan, therefore, development of the Specific Plan Area will not induce growth in the Specific Plan Area, adjacent undeveloped parcels, or within the City of Salinas that has not already been accounted for in the General Plan, and evaluated for environmental impacts by the city in the General Plan Final Program EIR. In addition, implementation the Salinas EDE would not result in the development of new housing. As such, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to impacts to population and housing.

This section describes and evaluates potential impacts associated with the provision of police protection, fire protection and emergency services, schools, parks, and other services for the proposed project. The information in this section is derived primarily from: *City of Salinas General Plan* (2002, as amended through 2015), City of Salinas Police Department website (http://www.ci.salinas.ca.us/services/police/police.cfm), *City of Salinas Police Department Crime Statistic Unit Uniform Crime Reporting (UCR) Program, City of Salinas Police Department Annual Report* (2014), City of Salinas Fire Department (http://www.ci.salinas.ca.us/services/fire/fire.cfm) (2017), *Salinas Public Facilities Impact Fee Study* (2014), Personal communications: Bill Heath Director of Facilities & MOT Santa Rita Union School District February 29 2016, Deputy Chief David Shaw Salinas Police Department March 1 2016, *City of Salinas, Parks and Recreation Department* (2016), and *California Department of Education Longitudinal Pupil Achievement Data System* (CALPADS) 2015. Two comments were received during the public review period for the Notice of Preparation regarding this topic. The comments were related to impacts to school facilities and are included in Appendix A.

3.9.1 ENVIRONMENTAL SETTING

POLICE PROTECTION

The City of Salinas Police Department operates out of a single station located at 222 Lincoln Avenue. According to the Salinas Police Departments Annual Report (2014), the Department has 133 full-time sworn officers, 47 full-time civilian employees and 14 part-time/temporary civilian employees. The Department benefits from the service of five civilian volunteers and 11 reserve police officers. Under the current sworn staffing level, the Department has 0.85 sworn officers for every 1,000 residents.

The Department has one Chief, two Deputy Chiefs, seven Commanders, 21 Sergeants, one Criminalist and 105 Officers. The Department is divided into three divisions; Field Operations, Investigations and Administration. The Field Operations Division is headed by one Deputy Chief who oversees the Patrol Division, K-9 Unit, Traffic Unit, Mobile Field Force, Animal Services and Parking Enforcement. In 2014, the Salinas Police Department had 90,279 Calls for service.

Current police staffing levels as of March 1, 2016 (personal communication with Deputy Chief David Shaw, Salinas PD) include 135 sworn police officers or 1 officer per 1155 people. The Salinas PD is authorized/budgeted for up to 170 sworn officers; however, due to rigorous hiring processes, officers transferring to other departments and retirement of officers, it has been challenging to fill positions with qualified officers.

The demand for police services and the need for police staff will grow in direct proportion to the growth of population and businesses within the City. Table 3.9-1 provides statistics on police calls/service from 2012 through 2014. Table 3.9-2 provides crime statistics during that same period, and Table 3.9-3 includes arrest statistics. The most frequent crimes requiring police

services from 2012 through 2014 are related to larceny and theft, and motor vehicle thefts. Violent crimes accounted for roughly 30% of crimes within the city.

TABLE 3.9-1: SALINAS POLICE DEPARTMENT CALL/SERVICE STATS (2012-2014)

	2012	*2013*	*2014*
Total PD Calls for Service	85,082	85,524	90,279
Total Police Reports Taken	16,551	17,510	17,092

SOURCE: SALINAS POLICE DEPARTMENT 2014 ANNUAL REPORT.

TABLE 3.9-2: SALINAS POLICE DEPARTMENT CRIME STATS (2012-2014)

CALL TYPE	*2012*	*2013*	*2014*
Murder	21	23	15
Negligent Manslaughter	0	0	0
Forcible Rape	37	35	28
Attempted Forcible Rape	4	1	4
Robbery with Weapon	301	309	274
Robbery, Strong Arm	187	142	175
Aggravated Assault	477	490	501
Non-Aggravated Assault	1,071	1,062	1,329
Arson	29	36	36
Total Burglaries	1,218	1,148	1,281
Total Larcenies-Theft	2,606	2,720	2,330
Motor Vehicle Theft	1,077	1,488	1,616
Total Crimes	**7,028**	**7,454**	**7,589**

SOURCE: SALINAS POLICE DEPARTMENT ANNUAL CRIME STATISTIC UNIT UNIFORM CRIME REPORTING (2012-2014).

TABLE 3.9-3: SALINAS POLICE DEPARTMENT ARREST STATISTICS (2012-2014)

ARRESTS TYPE	*ADULT*	*JUVENILE*	*TOTAL*
2012			
Felony	1,790	276	2,066
Misdemeanor	2,492	490	2,982
Driving Under Influence	--	--	219
Total Arrests	--	--	**5,267**
2013			
Felony	1,584	254	1,838
Misdemeanor	2,460	461	2,921
Driving Under Influence	--	--	230
Total Arrests	--	--	**4,989**
2014			
Felony	1,877	234	2,111
Misdemeanor	2,597	398	2,995
Driving Under Influence	--	--	268
Total Arrests	--	--	**5,374**

SOURCE: SALINAS POLICE DEPARTMENT ANNUAL REPORT 2014.

FIRE PROTECTION AND EMERGENCY SERVICES

The City of Salinas Fire Department (SFD) provides pre-hospital emergency medical services; minimizes loss from fires, hazardous materials incidents, and natural disasters and other

emergency services; and ensures that the community's emergency service resources are effectively and efficiently managed. SFD personnel are often the first to arrive at the scene of any emergency incident in the city. The SFD also educates the public in fire safety and prevention, and enforces safety codes. In 2014, the Salinas FD responded to 12,729 calls for service.

The SFD presently has six stations with the plans and land allocated for station seven. SFD has a contract with Monterey County Regional Fire Protection District (MCRFD) to provide fire protection services to a portion of their District. This brings the total protection area for Salinas to approximately 55 square miles.

The department operates with three platoons, (A, B, and C). Each platoon has six Engine Companies that are made up of a Captain, Engineer, and Firefighter, with one of the members being a paramedic. These engine companies are the initial responder to 911 calls for help. There is also one Truck Company, housed at Station 1, made up of a Captain, Engineer, and two Firefighters, with one of the members being a paramedic. The ladder company's responsibility is the rescue of trapped civilians, ventilation, access to upper floors, and forcing entry at a structure fire. The ladder truck carries a wide variety of ground ladders, tools and equipment to handle any type of emergency encountered. This includes the jaws-of-life and stabilization tools for vehicle extrications, specialty rope rescue equipment, and portable lighting. The aerial is also equipped with a water pipe capable of delivering 1000 GPM on larger fires. Each platoon has a Battalion Chief who commands the personnel on duty for their respective shifts. In 2015, these teams responded to a total of 13,857 calls with a minimum of 23 personnel assigned to each platoon. Total authorized staffing for the SFD is 98 personnel, 93 of those personnel being sworn public safety employees.

The department staffs six fire pumpers and one 100-foot ladder truck. A second Truck company, was added at Station 5, in the summer of 2016. In 2013, the Hazardous Materials team received formal typing to the State of California Type II Status after a rigorous examination process and was reorganized as the "Monterey Operational Area Hazardous Materials Response Team". The team is divided into two divisions, the Inland Division and the Coastal Division. The team recently achieved “Type I” certification, the highest level of state certification available. The department also has a Dry-Chem unit, a specialized unit for airport responses housed at Station 4, which will respond to airport emergencies. Station 5 houses a Type III wildland brush unit available for response within the city and for State Wide Mutual Aid requests.

The Salinas Fire Department has a minimum of seven firefighter paramedics on duty each day who respond to all 911 calls for medical assistance. The quick response by firefighter paramedics on the fire engines and truck company stationed throughout the city provides more immediate care during those initial critical minutes of medical emergencies.

Providing for the overall management of the Fire Department is Fire Administration. Fire Administration is made up of the Fire Chief, Deputy Fire Chief, Training Battalion Chief, and three administrative Captains. One Administrative Assistant supports Fire Administration.

The Fire Prevention Division (FPD) is committed to protecting the lives of citizens, emergency responders, property, environment, and business continuation. This is accomplished through comprehensive fire and life safety education, plan check, and fire code enforcement programs. The FPD staff conducts fire plans examination and inspections of new construction, and permitting and inspection of fire protection systems, hazardous operations, special events, and special occupancies. This division is made up of a Fire Marshall, three Fire Inspectors, and one part-time Fire Plan Checker. They are supported by one part time office technician. The Fire Chief emphasizes that the FPD staff take a balanced and uniform approach to application of the fire codes and regulations that affect the citizens, business, and the environment.

One of SFD's primary goals is to promote fire safety in the home. The SFD uses a mix of published safety information, firehouse tours, school visits, and Sparky the Fire Dog to get the fire and life safety message out. The FPD staff is also charged by State law to regularly inspect occupancies such as places of assembly, schools, multi-family dwellings, residential care facilities, and healthcare facilities.

Disaster preparedness is another responsibility of the SFD. Currently, due to budget cuts, the Fire Chief and the department's CERT instructor are the Disaster Preparedness Officers for the City of Salinas. Through this appointment, they are responsible for and participate in the planning, development, and promotion of disaster preparedness plans and programs for the entire city.

SCHOOLS

Santa Rita Union School District (SRUSD)

The Specific Plan Area is within the Santa Rita Union School District (SRUSD). SRUSD is comprised of approximately 3400 students from Kindergarten through Eighth Grade. SRUSD includes four elementary schools, and two middle schools, all located within a five mile radius of each other. Table 3.9-4 provides the enrollment for each school within the SRUSD for the 2015/2016 school year.

TABLE 3.9-4: SANTA RITA UNION SCHOOL DISTRICT: SCHOOL INVENTORY AND 2015/2016 ENROLLMENT

SCHOOL	*ENROLLMENT*	*TEACHERS*	*OVERALL STUDENT/TEACHER RATIO **
Bolsa Knolls Middle School	567	21	27
Gavilan View Middle School	598	23	26
La Joya Elementary School	503	21	23.9
McKinnon Elementary School	452	19	23.8
New Republic Elementary School	588	24	24.5
Santa Rita Elementary School	713	29	24.6
TOTAL	**3,421**	**137**	**25**

*SOURCE: SOURCE: BILL HEATH DIRECTOR OF FACILITIES & MOT SANTA RITA UNION SCHOOL DISTRICT CBEDS 10/07/2015. 2015-2016. *NOTE OVERALL STUDENT/TEACHER RATIO DOES NOT DENOTE CLASSROOM SIZE STANDARDS.*

In accordance with state targets the Santa Rita Union School District enrollment numbers are on target to meet the 24/27 state student per classroom target. Currently Gavilan View has 11 empty rooms that are currently awaiting modernization to bring them into ADA compliance which is expected by the end of summer 2016. McKinnon Elementary currently has 8 empty classrooms. The district is currently in the process of adjusting school boundary lines in order to bring roughly 100 students from Santa Rita elementary to McKinnon Elementary to meet class size reduction goals.

Salinas Union High School District (SUHSD)

The Specific Plan Area is located within the Salinas Union High School District (SUHSD), which includes middle schools, and high schools, and is comprised of approximately 14,400 students. Table 3.9-5 provides the enrollment for each school within the SRUSD for the 2014/2015 school year.

TABLE 3.9-5: SALINAS UNION HIGH SCHOOL DISTRICT: SCHOOL INVENTORY AND 2015/2015 ENROLLMENT

SCHOOL	*ENROLLMENT*
Alisal High School	2,480
Community Day School	25
El Puente School	430
El Sausal Middle School	952
Everett Alvarez High School	2,496
Harden Middle School	1,194
La Paz Middle School	1,038
Mount Toro High School	209
North Salinas High School	1,920
Salinas High School	2,541
Washington Middle School	1,152
TOTAL	**14,437**

SOURCE: SOURCE: CALIFORNIA DEPARTMENT OF EDUCATION LONGITUDINAL PUPIL ACHIEVEMENT DATA SYSTEM (CALPADS) 2015.

The district projects an additional 1,061 9-12th grade students by fall of 2019. Additionally, there is currently a capacity of 3,315 students added to existing school facilities through the use of portable facilities.

SUHSD is currently planning a high school site located in the northern portion of the Specific Plan area adjacent to Rogge Road. The site is approximately 38 acres and it has already been acquired by the Salinas Union High School District. The high school is expected to serve students both within and outside of the Specific Plan area; however, attendance areas will ultimately be adopted by the Board of Trustees. The planned high school within the Specific Plan Area is projected to accommodate 1,534 students at buildout, with phase 1 of the high school expected to open as early as fall 2018 with an initial capacity of 1,296 students.

LIBRARY SERVICES

Library services in the City of Salinas are located at three locations, and currently operates roughly

0.32 square feet of library facilities per capita, which is below the General Plan target service standard of 0.5 square feet of library space per capita.

Library facilities within the city include:

The **John Steinbeck Library**, located in the south/central part of Salinas, holds the major portion of the library collection including: the John Steinbeck Collection, yearbooks from Salinas' high schools, as well as online resources in finance, health, and literature. A Literacy Lab provides tutors, GED, computers and free materials to individuals and families learning to read. The Children's Room features story-time every Saturday at 11:00 a.m. The Digital Arts Lab has Apple computers and software to create music, film, photography, and graphic arts. The "U Name It Young Adult Lounge" has Xbox 360, 52-inch LCD plasma screen, graphic novels, manga, and classics.

The **El Gabilan Library** is located in the northern portion of the City on North Main Street and encompasses approximately 3,343 sf. This facility includes books, DVDs, CDs, and Internet access for both children and adults. Storytime is held every Thursday at 4:00 p.m.

The **Cesar Chavez Library** is located in the eastern portion of Salinas and features collections of books, DVDs, and CDs in both English and Spanish, as well as computers for Internet access. The Chicano Resource Center includes materials on the Chicano and Mexican American experience. The Homework Center is open Monday - Friday from 2:00 p.m. - 6:00 p.m., and Saturdays all day. A bilingual story-time is held every Wednesday at 4:00 p.m.

Planned Library Facilities: The City has identified an approximately 2.0-acre site in the CASP Specific Plan Area (adjacent to the WASP Specific Plan Area) for a new public library branch. Based on the 2-mile service area prescribed in the General Plan, the new branch library will service significant areas of the existing city south of Boronda Road and the Specific Plan Area.

PARKS AND RECREATION SYSTEM

City Parks

The city maintains a park service standard of three acres per 1000 population. The current park and recreation system in Salinas provides residents with 2.7 acres of parkland per 1000 people,[1] which is currently under the standard.

The Big Sur Land Trust (BSLT) is looking to implement a multi-benefit project that includes flood

[1] Board of Directors Meeting Monterey County Water Resources Agency September 2015.

management, public parkland, wetland restoration, water quality improvement and groundwater recharge in the central Carr Lake area of Salinas. Although this project is in in preliminary stages of potential development, it would increase park space within the city to a park ratio of 3.13 acres per 1000 people.

Recreational Facilities Inventory

Community Recreation Facilities provide citizens with indoor meeting areas for a variety of purposes and activities. Table 3.9-6 provides an inventory of community recreation facilities within the city. The City operates seven existing family and recreation facilities that range in size from 2,255 sf to 14,410 sf. The City has determined that in order to maintain the current service standard of 0.3653 sf of recreational facility per capita, it will be necessary to provide an additional 22,161 sf of recreation facilities to accommodate the projected population growth to 2035 allowed under the General Plan.

TABLE 3.9-6: CITY OF SALINAS COMMUNITY/RECREATION FACILITIES BUILDINGS

FACILITY NAME	*ADDRESS*	*SIZE (SF)*	*PARCEL SIZE (ACRES)*
Bread Box Center	754 N. Sanborn Rd.	14,410	1.00
Central Park Rec. Center	420 Central Ave.	2,255	7.8
Closter Park Rec. Center	401 Towt St.	4,865	6.95
El Dorado Park Rec. Center	1655 El Dorado Dr.	4,000	11.30
Firehouse Recreation Center	1330 E. Alisal St.	7,400	1.20
Hebbron Family Center	683 Fremont St.	8,510	0.67
Salinas Recreation Center	320 Lincoln Ave.	14,236	0.60

SOURCE: CITY OF SALINAS. PUBLIC FACILITIES IMPACT FEE STUDY - V7 (FEB 2014).

3.9.2 REGULATORY SETTING

STATE

Police Protection

There are no federal or state regulations related to police protection services applicable to the proposed project.

Fire Protection and Emergency Response

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

In accordance with California Code of Regulations Title 8 Sections 1270 "Fire Prevention" and 6773 "Fire Protection and Fire Equipment" the California Occupational Safety and Health Administration (Cal/OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

The State of California passed legislation authorizing the Office of Emergency Services (OES) to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. Non-compliance with SEMS could result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

EMERGENCY RESPONSE/EVACUATION PLANS

The State of California passed legislation authorizing the Office of Emergency Services (OES) to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. Non-compliance with SEMS could result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

FIRE PROTECTION

The California Fire Code contains regulations relating to construction and maintenance of buildings and the use of premises. Topics addressed in the Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions to protect and assist first responders, industrial processes, and many other general and specialized fire safety requirements for new existing buildings and premises.

UNIFORM FIRE CODE

The Uniform Fire Code with the State of California Amendments contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the California Fire Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The Fire Code contains specialized technical regulations related to fire and life safety.

CALIFORNIA HEALTH AND SAFETY CODE

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code. This includes regulations for building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

NFPA 1710

The NFPA 1710 Standards are applicable to urban areas and where staffing is comprised of career Firefighters. According to these guidelines, a career fire department needs to respond within six minutes, 90 percent of the time with a response time measured from the 911 call to the time of arrival of the first responder.

The standards are divided as follows:

- Dispatch time of one (1) minute or less for at least 90 percent of the alarms
- Turnout time of one (1) minute or less for EMS calls (80 seconds for fire and special operations response)
- Fire response travel time of four (4) minutes or less for the arrival of the first arriving engine company at a fire incident and eight (8) minutes or less travel time for the deployment of an initial full alarm assignment at a fire incident
- Eight (8) minutes or less travel time for the arrival of an advanced life support (ALS) (4 minutes or less if provided by the fire department

Parks/Recreation

QUIMBY ACT

The Quimby Act (California Government Code Section 66477) states that "the legislative body of a city or county may, by ordinance, require the dedication of land or impose a requirement of the payment of fees in lieu thereof, or a combination of both, for park or recreational purposes as a condition to the approval of a tentative or parcel map." Requirements of the Quimby Act apply only to the acquisition of new parkland and do not apply to the physical development of new park facilities or associated operations and maintenance costs. The Quimby Act seeks to preserve open space needed to develop parkland and recreational facilities; however, the actual development of parks and other recreational facilities is subject to discretionary approval and is evaluated on a case-by-case basis with new residential development. The City collects fees imposed by the park and recreation districts impact fees. The impact fees are collected at the time of building permit and include both capital impacts and land acquisition.

Schools

CALIFORNIA CODE OF REGULATIONS

The California Code of Regulations, Title 5 Education Code, governs all aspects of education within the State.

CALIFORNIA DEPARTMENT OF EDUCATION

The California Department of Education (CDE) School Facilities Planning Division (SFPD) prepared a School Site Selection and Approval Guide that provides criteria for locating appropriate school sites in the State of California. School site and size recommendations were changed by the CDE in 2000 to reflect various changes in educational conditions, such as lowering of class sizes and use of advanced technology. The expanded use of school buildings and grounds for community and agency joint use and concern for the safety of the students and staff members also influenced the modification of the CDE recommendations.

Specific recommendations for school size are provided in the School Site Analysis and Development Guide. This document suggests a ratio of 1:2 between buildings and land. CDE is aware that in a number of cases, primarily in urban settings, smaller sites cannot accommodate this ratio. In such cases, the SFPD may approve an amount of acreage less than the recommended gross site size and building-to-ground ratio.

Certain health and safety requirements for school site selection are governed by state regulations and the policies of the SFPD relating to:

- Proximity to airports, high-voltage power transmission lines, railroads, and major roadways;
- Presence of toxic and hazardous substances;
- Hazardous facilities and hazardous air emissions within one-quarter mile;
- Proximity to high-pressure natural gas lines, propane storage facilities, gasoline lines, pressurized sewer lines, or high-pressure water pipelines;
- Noise;
- Results of geological studies or soil analyses;
- Traffic and school bus safety issues.

THE KINDERGARTEN-UNIVERSITY PUBLIC EDUCATION FACILITIES BOND ACT OF 2002 (PROP 47)

This Act was approved by California voters in November 2002 and provides for a bond issue of $13.05 billion to fund necessary education facilities to relieve overcrowding and to repair older schools. Funds will be targeted at areas of greatest need and must be spent according to strict accountability measures. Funds will also be used to upgrade and build new classrooms in the California Community Colleges, the California State University, and the University of California in order to provide adequate higher education facilities to accommodate growing student enrollment.

LEROY F. GREENE SCHOOL FACILITIES ACT OF 1998 (SB 50)

The "Leroy F. Greene School Facilities Act of 1998," also known as Senate Bill No. 50 or SB 50 (Chapter 407, Statutes of 1998), governs a school district's authority to levy school impact fees. This comprehensive legislation, together with the $9.2 billion education bond act approved by the voters in November 1998 known as "Proposition 1A", reformed methods of school construction financing in California. SB 50 instituted a new school facility program by which school districts can apply for state construction and modernization funds. It imposed limitations on the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development and provided the authority for school districts to levy fees at three different levels:

- **Level I** fees are the current statutory fees allowed under Education Code 17620. This code section provides the basic authority for school districts to levy a fee against residential and commercial construction for the purpose of funding school construction or reconstruction of facilities. These fees vary by district for residential construction and commercial construction and are increased biannually.
- **Level II** fees are outlined in Government Code Section 65995.5, allowing school districts to impose a higher fee on residential construction if certain conditions are met. These conditions include having a substantial percentage of students on multi-track year-round scheduling, having an assumed debt equal to 15–30 percent of the district's bonding

capacity (percentage is based on revenue sources for repayment), having at least 20 percent of the district's teaching stations housed in relocatable classrooms, and having placed a local bond on the ballot in the past four years which received at least 50 percent plus one of the votes cast. A Facility Needs Assessment must demonstrate the need for new school facilities for unhoused pupils is attributable to projected enrollment growth from the construction of new residential units over the next five years.

- **Level III** fees are outlined in Government Code Section 655995.7. If State funding becomes unavailable, this code section authorizes a school district that has been approved to collect Level II fees to collect a higher fee on residential construction. This fee is equal to twice the amount of Level II fees. However, if a district eventually receives State funding, this excess fee may be reimbursed to the developers or subtracted from the amount of state funding.

LOCAL

City of Salinas Impact Fees

The City of includes development impact fees schedules to fund public services and facilities, including fees to fund police and fire, library, and recreation services.

City of Salinas General Plan

The City of Salinas General Plan contains the following policies that are relevant to public services:

Land Use Element

Policy LU-4.1: Provide an effective and responsive level of fire protection, public education and emergency response service (including facilities, personnel, and equipment) through the Salinas Fire Department.

Policy LU-5.1: Provide an effective and responsive level of police protection (including facilities, personnel, and equipment) through the Salinas Police Department.

Policy LU-5.2: Implement alternative policing methods, such as Community Policing, youth programs and crime awareness public education programs to reduce the incidence of crime within Salinas.

Policy LU-9.1: Work in partnership with local school districts and assist them in identifying land needed for new school sites so that sufficient facilities are provided for students.

Policy LU-9.2: Consider impacts of proposed projects on school enrollment and facilities when acting on annexation applications to ensure that public services and facilities service standards identified in Table LU-4 are met.

Policy LU-9.3: Support the development of career/professional schools that encourage a well-trained work force.

Policy LU-9.4: Work with Monterey Salinas Transit to provide transit routes to serve

education institutions.

Policy LU-10. 1: Provide library services and facilities that meet:

- The Library Department Mission
- The State of California guidelines for library facilities, and
- The Library Commission's recommended standards of 0.5 square feet of public use space per capita and library services within 2 miles of every City resident.

Policy LU-10.2: Maintain and continue to develop a high-quality library system that: enhances the cultural life of the community; is the repository of people's ideas, knowledge and thoughts; and is the information center for the community.

Policy LU-10.3: Improve the library system by building at least two branch libraries and by expanding current library facilities, with interim expansion of service achieved through alternative means such as bookmobiles, portable buildings and joint-use facilities.

Policy LU-10.4: Explore the potential for coordination of public and school libraries, especially for the proposed McKinnon branch.

Policy LU-10.5: Develop a high quality library system that achieves the Library Department mission to be the focal point in the community for opening doors to lifelong learning and enjoyment, and the catalyst for promoting equal access to information.

Policy LU-11.1: Provide and maintain a variety of community facilities.

Policy LU-11.2: In areas of high concentration of low-income families or where sufficient needs exist, consider assisting with the development of community facilities (e.g., youth and senior centers) to meet their special needs and provide space for necessary programs and activities.

Policy LU-11.3: As the City grows, the need for additional neighborhood, senior, youth, and day-care centers should be evaluated and facilities provided as needed.

Policy LU-11.4: Provide community facilities that encourage and facilitate public participation and pride in the community, such as cultural and public gathering centers.

Policy LU-11.5: Work with Monterey Salinas Transit to provide transit routes to serve new community and institutional facilities and to identify a North Salinas transit facility site.

Housing Element

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.

Conservation and Open Space Element

Policy COS-7.1: Develop a high-quality public park system that provides adequate space and facilities for a variety of recreational opportunities conveniently accessible to all Salinas residents.

Policy COS-7.2: Maximize the use of built and natural features to develop a citywide network of parks and open spaces with Carr Lake, Gabilan Creek and the Sherwood Park/Rodeo Grounds complex as essential elements of the open space network.

Policy COS-7.3: Plan park and recreation facilities in cooperation with concerned public and private agencies and organizations, particularly school districts and neighborhood residents.

Policy COS-7.4: Develop an indoor sports center.

Policy COS-7.5: Identify the recreation needs of special user groups, such as the disabled and elderly, and address these in park and recreation facility development.

Policy COS-7.6: Work with all school districts in planning for parks and recreation facilities to maximize community recreation opportunities through joint use.

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 needs.

Policy COS-7.8: While supporting the development of private recreational facilities, ensure that the supply and maintenance of public parks and recreational opportunities is adequate to ensure permanent availability of parks and recreational facilities for use by the entire community.

Policy COS-7.9: Require new residential development to provide land and/or fees to achieve a minimum of 3.0 acres per additional 1,000 population for developed public parklands for community or neighborhood parks.

Policy COS-7.10: Consider formation of special districts, issuance of bonds and other means for financing large urban parks and special facilities serving all of Salinas.

Policy COS-7 .1 1: Develop and maintain an integrated system of open-space corridors and trails along utility easements, power-transmission-line rights-of-way, the reclamation ditch, stream banks, drainage- ways, slopes, and other

natural features.

Policy COS-7.12: Link activity centers, recreational opportunities, transit nodes and other services to the integrated trails network.

Policy COS-7.13: Developments within Future Growth Areas shall be conditioned to provide all the land and improvements required to achieve the parkland standard of three acres of developed public parkland per 1,000 residents, to meet existing park acreage needs, as referenced in Table COS-5. All new parks constructed within the City shall meet, at a minimum, the park standards established in Table COS-2.

Safety Element

Policy S-1.3: Support the development and operation of community centers and recreational facilities as a pre-emptive strategy to reduce youth related crime.

Policy S-1.4: Promote after school programs, volunteer programs, and Neighborhood Watch programs to reduce the risk of criminal activity.

3.9.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on public services if it would result in:

> Substantial adverse physical impacts associated with the provisions of new or physically altered government facilities, and/or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:
>
> - Fire Protection
> - Police Protection
> - Schools
> - Parks
> - Other public facilities

IMPACTS AND MITIGATION MEASURES

Impact 3.9-1: The proposed project may result in effects on fire department staffing, fire response times, or has the potential to require the construction of fire department facilities which may cause substantial adverse physical environmental impacts (Less than Significant with Mitigation)

The Salinas Fire Department (Salinas FD) protects life, property and the environment from the hazards of fire, explosion and hazardous materials incidents, and provides Advanced Life Support emergency medical services to City residents, businesses, and visitors. These services are provided 24-hours per day from six fire stations strategically located throughout the City. General Plan Table LU-4 includes a service standard that calls for fire protection facilities necessary to provide a 6-minute response from receipt of a 911 call for arrival of first company 90% of the time.

The Salinas FD service area includes the entire area within the existing political boundaries of the City of Salinas and the future growth areas. The Fire Department also provides contractual fire services to approximately 31 square miles of Monterey County Regional Fire Protection District surrounding the City. As noted above, fire protection service level is generally defined in terms of the timely arrival of a sufficient number of appropriately trained personnel and equipment necessary to stabilize and mitigate various types of emergencies. This is accomplished through a deployment plan that strives to meet an initial response service level (6 minutes or less, 90% of the time).

The project area is currently served by Station 6 located at 45 East Bolivar Street. Station 6 houses an ALS engine company staffed with three personnel. This engine also responds into the contract are of Bolsa Knolls, Country Club Meadows and San Juan Estates through an agreement with MCRFD.

In order to maintain the General Plan's 6:00-minute or less first response service standard, an additional fire station facility and engine company will be required within the North of Boronda Future Growth Area (FGA). Projected future growth will also require a second aerial ladder company to maintain the 8 to 10-minute response goal for this specialized type of apparatus throughout the entire service area (City of Salinas Public Facilities Impact Fee Study, 2014).

One new station will be required within the Central Area of the FGA to accommodate buildout of the FGA. The new station, or temporary facilities agreed upon by the Fire Department, should be available before new residential development occurs outside of the existing 6-minute response area. An approximately 1.5-acre site for the new fire station has been identified in the Central Area near the corner of Natividad Road and "C" Street adjacent to the Specific Plan Area. Currently, the Central Area Specific Plan is in the preliminary program and design stage, with a Draft EIR tentative release date in late 2018. Area specific and construction impacts of additional fire service facilities

within the Central Area would be addressed as part of the environmental review of the Central Area Specific Plan.

As described in Section 2.0 (Project Description), the proposed land use mix would result in the addition of up to 4,340 new residential units and 15,928 residents at project build-out. The proposed project also includes a business component that identifies approximately 571,500 square feet of commercial uses that would require fire services.

The proposed Specific Plan would create a need for new or expanded fire protection facilities that could result in offsite physical impacts on the environment. Any future development under the approved General Plan, which includes all development within the FGAs, would be required to comply with regulations, policies, and standards included in the General Plan, Final Environmental Impact Report, Salinas General Plan (Cotton Bridges Associates 2002), and Final Supplemental for the Salinas General Plan Final Program EIR (EDAW/AECOM 2007). The site specific environmental impact of constructing a new fire facility within the FGA will be reviewed under CEQA as part of the Central Area Specific Plan EIR, which is expected to be completed in 2018. Additionally, impact fees will recover future development's proportionate share of Fire Department capital asset costs. The City collects impact fees from new development based upon projected impacts from the development, for purposes of mitigating for project impacts on public facilities, including fire protection facilities. The City also reviews the adequacy of impact fees on an annual basis to ensure that the fee is commensurate with anticipated future facilities demands, assessed on a fair share basis for new development. Payment of the applicable impact fees by the project applicant, and ongoing revenues that would come from property taxes, sales taxes, and other revenues generated by the project, would ensure that project impacts to fire services are ***less than significant***.

MITIGATION MEASURES

Mitigation Measure 3.9-1: *Prior to the issuance of Certificates of Occupancy, the applicant shall pay all applicable project impact fees per the impact fee schedule.*

Impact 3.9-2: The proposed project may result in effects on police staffing, or has the potential to require the construction of police department facilities which may cause substantial adverse physical environmental impacts (Less than Significant)

The current service ratio for the City of Salinas Police Department is .85 officers per 1,000 people (133 sworn officers/ 156,667 people). As described in section 2.0 (Project Description), the Specific Plans land use mix would result in the addition of up to 4,340 new residential units and 15,928

residents at project build-out. To keep current staffing levels throughout the city, the proposed project would require an additional 13.5 sworn officers according to the current service standard of 0.85 officers per 1,000 people; however, the service ratio from 2000 through 2012 averaged 1.21 Police Officers per 1,000 population[2]. Annual staffing levels are determined by the City on an annual basis. To maintain historical staffing levels the proposed project would require an additional 19 sworn officers according to the 1.21 average service standard.

As described in the Salinas Police Departments most recent Annual Report (2014), the police department has completed a needs analysis and a new building is expected to be built in the next 3-5 years on property that is currently being acquired from the County. Measure G was approved by the voters and financing of a police facility and will be accomplished through the use of a 63-20 structure (a tax-exempt bonds process), and utilizing a non-profit corporation that will cause the project to be designed and developed through a fixed-price contract to meet the specifications that are set by the City of Salinas. The new police station will be located in the Alisal Marketplace at 312 East Alisal Street, and replace the existing police station that was built in 1958 on Lincoln Street. The new police station is expected to be completed and operational in the fall of 2019. Development of the new facility will be required to be reviewed under CEQA for impacts associated with the development of the facility.

Police service is evaluated and addressed annually on a city-wide level by the Salinas City Council and Police Chief. The City Council adopts an annual budget allocating resources to police services, which effectively establishes the service ratio for that particular year. The annual budget is based on an assessment of community needs and available resources as determined by the City Council and the Police Chief.

As stated previously, the current and future spatial and facility needs of the Salinas Police Department were assessed in 2014, and it has been determined that a new public safety facility that allows for long-term expansion would be required to meet the needs of the City. Development of the Specific Plan Area did not directly trigger the need for a new facility, however additional staffing and patrols would be required to serve the proposed Specific Pan Area. The City collects impact fees from new development based upon projected impacts from the development. The City also reviews the adequacy of impact fees on an annual basis to ensure that the fee is commensurate with anticipated future facilities demands, assessed on a fair share basis for new development. Payment of the applicable impact fees by the project applicant as required by Mitigation Measure 3.9-1, and ongoing revenues that would come from, property taxes, sales taxes, and other revenues generated by the project, would ensure that project impacts to police services are ***less than significant***.

[2] City of Salinas Budget (Public Facilities Impact Fee Study: Police Services Impact Fees 2014)

Impact 3.9-3: Project implementation may result in effects on schools, or has the potential to require the construction of school facilities which may cause substantial adverse physical environmental impacts (Less than Significant with Mitigation)

As described in section 2.0 (Project Description), the Specific Plans land use mix would result in the addition of up to 4,340 new residential units and 15,928 residents at project build-out. The increase in population of 15,928 people would result in the introduction of additional students to the Salinas Union High School District (SUHSD), and Santa Rita Union School District (SRUSD). Table 3.9-7 presents the estimated increase in student enrollment as a result of the proposed project.

TABLE 3.9-7: PROJECTED PLAN AREA STUDENT GENERATION ESTIMATES

DWELLING UNIT TYPE	*TOTAL DWELLING UNITS*	*EDUCATION LEVEL*	*GENERATION FACTOR*	*STUDENTS GENERATED*
SINGLE-FAMILY (NE AND NG-1)	3,164	Elementary	0.3572	1,130
		Middle	0.1915	587
		High	0.162	740
MULTIFAMILY (NG-2 AND VILLAGE CENTER)	1,176	Elementary	0.7831	921
		Middle	0.2955	348
		High	0.239	281
Total				4,008

SOURCE: SALINAS UNION HIGH SCHOOL DISTRICT: 2016 SCHOOL FACILITY NEEDS ANALYSIS AND JUSTIFICATION REPORT; SANTA RITA UNION SCHOOL DISTRICT SCHOOL FACILITIES NEEDS ANALYSIS MARCH 4, 2016.

NOTE: TABLE ASSUMES (HIGH) SINGLE FAMILY (SF) DETACHED UNITS FOR ALL SF UNITS, DUE TO LACK OF DETAILED LOT COUNTS FOR ATTACHED AND DETACHED SFU'S.

The proposed project is expected to generate approximately 4,008 additional students for the SUHSD and SRUSD. Under the provisions of SB 50, a project's direct impacts on school facilities are fully mitigated via the payment of the requisite new school construction fees established pursuant to Government Code Section 65995. However, even where applicants have agreed to pay school impact mitigation fees, if the proposed development requires the construction or expansion of additional facilities that would cause other environmental impacts—traffic or construction impacts, for example—then those impacts to non-school resources may be analyzed under CEQA (Gov. Code § 65995(i)).

The proposed project includes three schools within the Specific Plan Area. One of these schools (McKinnon Elementary) has already been constructed. A description of the additional planned schools are listed below:

- Two elementary schools are planned to be constructed on opposite sides of the Specific Plan Area. One school will be located on a 10.0-acre site in Neighborhood 2, while the other will be located in Neighborhood 3 on a 10.0-acre site. The two new elementary

schools would be expected to serve students residing in the Specific Plan Area and adjacent areas. Attendance areas will ultimately be adopted by the Board of Trustees.

- The Specific Plan provides a site for one middle school. The middle school site, approximately 20 acres in size, is located adjacent to and north of the community park. The middle school is expected serve students residing in the Specific Plan Area as well as adjacent areas as determined by attendance areas ultimately adopted by the Board of Trustees.

- A high school site is located in the northern portion of the Specific Plan area adjacent to Rogge Road. The site is approximately 38 acres and it has already been acquired by the Salinas Union High School District. The high school is expected to serve students both within and outside of the Specific Plan Area. Attendance areas will ultimately be adopted by the Board of Trustees.

The elementary and middle schools will be part of the Santa Rita Union School District. The high school will be part of the Salinas Union High School District. Physical impacts from construction of these school sites within the Specific Plan Area would be related to relevant environmental topics includes in this EIR, such as: air quality (Section 3.1), biological resources (Section 3.2), cultural resources (Section 3.3), greenhouse gas emissions and climate change (Section 3.4), hazards and hazardous materials (Section 3.5), hydrology and water quality (Section 3.6), noise (Section 3.7) population (Section 3.8), public services (Section 3.9), transportation (Section 3.10), and utilities (Section 3.11). A detailed discussion of relevant operational and construction impacts is found in each respective section of this EIR. Furthermore, environmental review would be required for each school by the School District prior to approval of a design for the facility and would consider any site-specific impacts unknown at this time.

Development of the Specific Plan Area would result in increased enrollment at SUHSD and SRUSD. Additional students generated within each of the school districts from development of the Specific Plan could overburden existing schools serving the Specific Plan Area, as the majority of these schools are already operating near or over their design capacity. With the development of additional schools proposed within the Specific Plan Area, the School Districts are anticipated to be able to meet the needs of school children generated by the proposed Specific Plan as long as the school facilities are available concurrent with need. In the event that school construction is delayed, short-term overcrowding could occur at existing schools.

As described previously, physical impacts from construction of school sites within the Specific Plan Area would be related to the relevant environmental topics included throughout this EIR, which are found to be ***less than significant*** with the implementation measures contained in relevant sections. Additionally, through the payment of applicable impact fees by the project applicant as described in in the mitigation measure below, would ensure that direct financial project impacts to school services are ***less than significant***.

MITIGATION MEASURES

Mitigation Measure 3.13-2: *Prior to the issuance of a building permit, the applicant shall pay applicable school fees mandated by SB 50 to the Salinas Union High School District (SUHSD), and Santa Rita Union School District (SRUSD).*

Impact 3.9-4: Project implementation may result in effects on parks, or has the potential to require the construction of park facilities which may cause substantial adverse physical environmental impacts (Less than Significant)

The General Plan establishes a park dedication standard of three acres of parkland per 1,000 residents. The proposed project includes a total of 11 parks, consisting of 49.76 net acres of public parkland proposed within the Specific Plan Area (Figure 3.9-2). This acreage slightly exceeds the City's Parkland (Quimby Act) requirements of three acres per 1,000 persons (47.78 net acres). The Specific Plan includes three types of public parks: community, neighborhood, and small parks. Further details of each park type are provided below:

- **Community Park**: The approximately 30-acre community park will be the focal point of the residential neighborhoods and the entire WASP. It would provide a wide variety of amenities and significant open space to both residents of the community and surrounding areas. As the largest park in the Future Growth Area, it would contain a significant concentration of sports fields as well as passive recreational amenities. The community park would be adjacent to an approximately 10-acre open space area for periodic supplemental storm water detention and retention. This combined area of park and open space totals approximately 40 acres.

- **Neighborhood Parks**: Four neighborhood parks are proposed. These parks will vary from approximately 2.35 to 3.63 acres in size. They would serve as focal points within each of the four residential neighborhoods. These parks would provide a variety of amenities and open space to the residents of the Specific Plan Area and surrounding areas. Proposed features of these parks would include open space for active recreation and areas for passive recreation. Special features may be located within these parks to further enhance the character and identity of the neighborhood that each park serves.

- **Small Parks**: Six small parks are proposed. Small parks are 1.86 acres or less in size, and average approximately 1.1 acres. These parks will not be characterized by large sports fields that may be found in the community park and some neighborhood parks, but they would provide passive open space and recreation. Potential amenities include seating areas, picnic areas, sports courts, and children's tot lots or playgrounds.

While the proposed project would increase the demand for parks or other recreational facilities based on the population growth, the amount of parkland and open space provided within the

Specific Plan Area sufficiently meets the City's parkland requirements. No additional need for park space is required, and it is not anticipated that any substantial physical deterioration of existing facilities would occur or be accelerated.

Physical impacts from construction of parks within the Specific Plan area would be related to relevant environmental topics includes in this EIR, such as: Air Quality (Section 3.1), Biological Resources (Section 3.2), Cultural Resources (Section 3.3), Greenhouse Gas Emissions and GHG, Climate Change, and Energy (Section 3.4), Hazards and Hazardous Materials (Section 3.5), Hydrology and Water Quality (Section 3.6), Noise (Section 3.7) Population and Housing (Section 3.8), Public Services (Section 3.9), Transportation and Circulation (Section 3.10), and Utilities (Section 3.11). A detailed discussion of relevant operational and construction impacts is found in each respective section of this EIR.

The proposed project exceeds the General Plan park standards by providing 49.76 acres of parkland, with only 47.78 acres warranted. These parks will be constructed within the boundary of the Specific Plan Area. The physical impacts from the construction of the Specific Plan land uses, including the parks, is found in each respective section of this EIR. Implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

Impact 3.9-5: Project implementation may result in effects on other public facilities (Less than Significant)

The proposed project would increase demand for other public facilities within the City of Salinas, such as libraries, and community and recreation buildings. However, to mitigate increased demand on library and community facilities, the City collects public facilities impact fees from new development based upon projected impacts from the development. The City also reviews the adequacy of impact fees on an annual basis to ensure that the fee is commensurate with the service or facility.

The City has identified an approximately 2.0-acre site in the Central Area Specific Plan for a new branch library. Based on the 2-mile service area prescribed in the General Plan, the new branch library will also service significant areas of the existing city south of Boronda Road. The WASP Specific Plan will contribute its fair share to the acquisition of the site and the construction of the new branch library through the Public Facilities Impact Fee program.

The City also seeks to develop one or more recreation centers within the proposed neighborhood parks of the FGA. The precise location and configuration of recreation centers is yet to be determined by the City. The timing and phasing of construction of the recreation centers will be determined by the City concurrently with development of the FGA. The Specific Plan provides that the West Area will contribute its fair share of the costs of construction of the recreation centers through the Public Facilities Impact Fee program.

Development and population increases within the Specific Plan Area will contribute to the need for additional public facilities including library facilities and recreational facilities. Physical impacts

from construction of public facilities are required to be analyzed under CEQA. Physical impacts from construction of other public facilities within the Specific Plan Area are addressed throughout this EIR: air quality (Section 3.1), biological resources (Section 3.2), cultural resources (Section 3.3), greenhouse gas emissions and climate change (Section 3.4), hazards and hazardous materials (Section 3.5), hydrology and water quality (Section 3.6), noise (Section 3.7) population (Section 3.8), transportation (Section 3.10), and utilities (Section 3.11). A detailed discussion of relevant operational and construction impacts is found in each respective section of this EIR. The Central Area Specific Plan (CASP) immediately east of the Specific Plan Area (WASP) includes sites for additional proposed facilities that will serve the proposed West Area Specific Plan Area. The CASP is currently being development through the cooperation the project applicant and the City of Salinas. CEQA review is anticipated for the CASP area in 2018. Additionally, payment of the applicable impact fees by the project applicant, and ongoing revenues that would come from property taxes, sales taxes, and other revenues generated by the project, would ensure that project financial impacts to other public facilities are ***less than significant***.

Impact 3.9-6: Under cumulative conditions the proposed project may result in effects on public facilities (Less than Significant and Less than cumulatively considerable)

Under cumulative conditions future local and regional growth will result in increased demand for schools, police protection, fire protection, and library services. The City and its associated service providers must continue to evaluate the levels of service desired and the funding sources available to meet increases in demand.

The 2002 General Plan Final Program EIR analyzed impacts to public services (including police protection, fire and emergency services, schools, and libraries), and found that General Plan policies addressed the public services needs of future development resulting from implementation of the General Plan. The specific environmental impact of constructing new facilities could not be determined at the time, but the Final Program EIR found that construction and operation of such facilities could potentially cause significant impacts. These potential impacts, however, were addressed by the General Plan policies and mitigation measures included in Sections 5.1 through 5.12 of the Salinas General Plan Final Program EIR.[3]

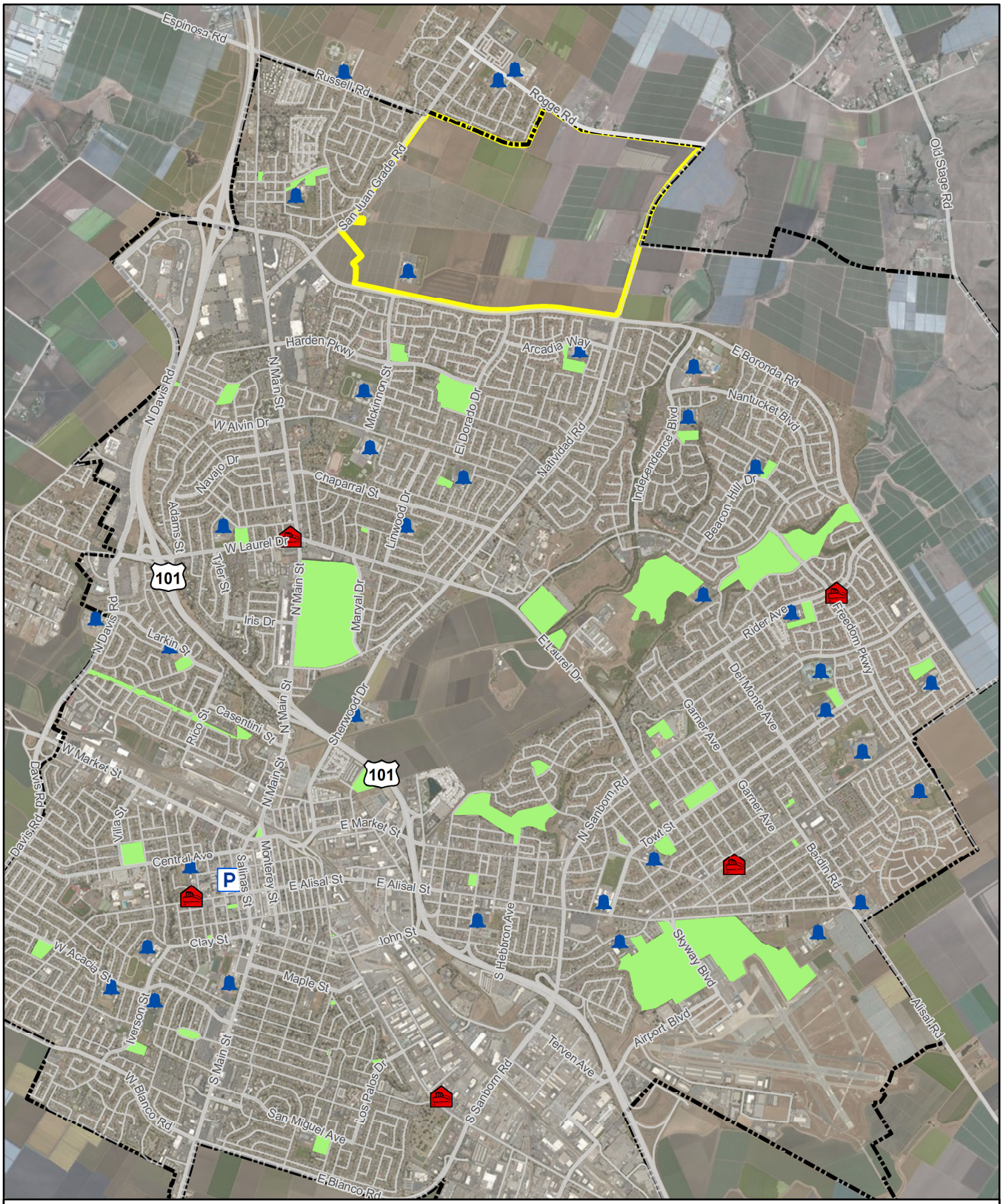
The impact fees developed and reviewed by the City will recover future development's proportionate share of capital asset costs. Fees, as applied only to new development, represent future development's proportionate share of public services and facilities capital costs.

[3] Sphere of Influence Amendment and Annexation Initial Study, August 2007

However, while new development will avoid project level impacts associated with service ratios to the extent allowed by the associated impact fees, there are existing deficiencies with regard to library services that will need to be addressed by the City in order to meet service goals set forth by the General Plan. It is important to note that impact fees may not be used to correct existing deficiencies, but may be used to pay for increased demand for public facilities or increased demand upon existing capital facilities provided that those facilities are needed to serve additional development and have the capacity to do so, given relevant level-of-service standards.

As described previously, the Salinas General Plan Final Program EIR found that construction and operation of future public facilities could potentially cause significant impacts. These potential impacts, however, were addressed by the General Plan policies and mitigation measures included in Sections 5.1 through 5.12 of the General Plan Final Program EIR. Project-specific information is currently unknown for future facilities, however, all individual future projects will be required to be reviewed under CEQA. The proposed project and future projects within the FGA's are required to pay all applicable impact fees. Additionally, ongoing revenues that would come from property taxes, sales taxes, and other revenues generated by the proposed project, would fund services and facility improvements throughout the city. The proposed project would contribute its fair share based on project impacts, and includes additional park space over what is required to meet the General Plan's goal of three acres per 1000 residents. Therefore, the provisions of services and facilities contained within the Specific Plan Area and the payment of all applicable impact fees would ensure that the proposed project's share of impacts to public facilities under cumulative conditions are less than significant**.** As such, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution on impacts to public services.

This page left intentionally blank.



Public Facilities

- Fire Station
- Police Department
- School
- Park

Planning Areas

- City of Salinas
- West Area Specific Plan

N

0 1,000 2,000

Feet

1:45,000

Sources: Monterey County GIS; City of Salinas GIS; Google Maps; ArcGIS Online BING Aerial Imager Service. Map date: June 30, 2016.

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.9-1: Public Facilities

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.

Figure 3.9-2: Proposed Parks

Source: AECOM, City of Salina Figure 8 Parks and Open Space

This page left intentionally blank.

This chapter describes the potential impacts to the transportation system associated with adoption and implementation of the proposed WASP. To provide a context for the impact analysis, this chapter begins with the regulatory framework influencing the transportation system and providing the basis for impact significance thresholds used in the impact analysis, followed by an overview of the analysis methodologies that were used. The transportation setting, which is a description of the existing physical and operational conditions for the transportation system, is then discussed along with an overview of existing and future conditions without the Specific Plan. The chapter concludes with a description of the Specific Plan, followed by the impact analysis findings and recommended mitigation measures.

Information in this section is derived primarily from *The Draft West Area Specific Plan Transportation Impact Analysis* prepared by Fehr & Peers. There were two comments received during the public review period for the Notice of Preparation (NOP) related to transportation and circulation: one from Monterey-Salinas Transit (MST) regarding transit service, and one from Caltrans. These are provided in Appendix A.

3.10.1 REGULATORY SETTING

The City of Salinas General Plan and a variety of regional, State, and Federal plans, legislation, and policy directives provide guidelines for the safe operation of streets and transportation facilities in Salinas. While the City of Salinas has primary responsibility for the maintenance and operation of local transportation facilities in its jurisdiction, Salinas staff works on a continual basis with responsible regional, State, and Federal agencies, including the Transportation Agency for Monterey County (TAMC), the California Department of Transportation (Caltrans), and the Federal Highway Administration (FHWA), as well as others, to maintain, improve, and balance the competing transportation needs of the community.

STATE

Caltrans

DEPUTY DIRECTIVE 64-R1: COMPLETE STREETS – INTEGRATING THE TRANSPORTATION SYSTEM

In 2001, Caltrans adopted Deputy Directive (DD) 64; a policy directive related to non-motorized travel throughout the state. In October 2008, DD 64 was strengthened to reflect changing priorities and challenges. DD 64-R1 states:

> *The Department views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system. Providing safe mobility for all users, including motorists, bicyclists, pedestrians and transit riders, contributes to the Department's mission/vision: "Improving Mobility across California."*

DIRECTOR'S POLICY 22: "DIRECTOR'S POLICY ON CONTEXT SENSITIVE SOLUTIONS"

Director's Policy 22, a policy regarding the use of "Context Sensitive Solutions" on all State highways, was adopted by Caltrans in November of 2001. The policy reads:

> *The Department uses "Context Sensitive Solutions" as an approach to plan, design, construct, maintain, and operate its transportation system. These solutions use innovative and inclusive approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation safety, maintenance, and performance goals. Context sensitive solutions are reached through a collaborative, interdisciplinary approach involving all stakeholders.*
>
> *The context of all projects and activities is a key factor in reaching decisions. It is considered for all State transportation and support facilities when defining, developing, and evaluating options. When considering the context, issues such as funding feasibility, maintenance feasibility, traffic demand, impact on alternate routes, impact on safety, and relevant laws, rules, and regulations must be addressed.*

REGIONAL

Transportation Agency for Monterey County (TAMC)

TAMC serves as Monterey County's regional transportation planning agency, and is a state designated agency responsible for planning and financial programming of transportation projects.

REGIONAL TRANSPORTATION PLAN (RTP)

TAMC is responsible for preparing the Regional Transportation Plan (RTP) for Monterey County. The RTP includes policy guidance, plans, and programs to attain a balanced comprehensive, multimodal transportation system; proposed solutions to transportation issues; addresses all modes of travel; and, identifies anticipated funding for projects and programs. The RTP is embedded in the Association of Monterey Bay Area Government's *2040 Metropolitan Transportation Plan/Sustainable Communities Strategy and Regional Transportation Plans for Monterey, San Benito, and Santa Cruz Counties* (Association of Monterey Bay Area Governments, 2014) (MTP/SCS). The objective of the RTP and the MTP/SCS is to comply with current California Transportation Commission Regional Transportation Plan Guidelines.

AMBAG as the federally-designated metropolitan planning organization representing Monterey, San Benito and Santa Cruz counties, is required by both federal and state law to prepare a long-range (at least 20 years) transportation planning document known as a Metropolitan Transportation Plan (MTP). The MTP contains a compilation of the projects proposed in the RTPs prepared by the Council of San Benito County Governments, the Santa Cruz County Regional Transportation Commission and

TAMC. The MTP is a document used to achieve a coordinated and balanced regional transportation system.

TAMC REGIONAL DEVELOPMENT IMPACT FEE PROGRAM

The RTP also includes funding sources and strategies for financing improvements to the regional transportation system. Key components of the funding strategy are a regional development impact fee and a sales tax increase. The regional fee is applied to new development within local jurisdictions that are members of TAMC, including the City of Salinas. Funds generated through the regional development impact fee would, among other major projects, be used to fund projects included in the RTP that would benefit circulation conditions in and around the City. Member agencies must adopt the regional development impact fee before they can begin to collect the fee from new development. The City of Salinas adopted the fee program in August 2008. Caltrans considers payment of the regional development impact fee as mitigation for cumulative impacts on the regional (state) highway system.

LOCAL

City of Salinas General Plan

The City of Salinas General Plan is a long-range, comprehensive planning document required by State law. The General Plan was adopted by the City in 2002 to set policy and guide future growth, development, and conservation of resources.

The Monterey County General Plan Circulation Element provides policy direction for the transportation systems that serve the unincorporated lands of Monterey County, including roadways that could be affected by the proposed project. The element describes how the County intends to serve transportation needs for the next 20 years as the County's population grows. It identifies the general location and extent of existing and proposed major transportation facilities for vehicle, rail, air, water, and bicycle transportation including goals relative to: major roadways, movement of people and goods, scenic highways, and public transit. Policies from the element that generally apply to consideration of impacts of the proposed project on County roadway facilities include:

Circulation Element

Policy C-1.2: Strive to maintain traffic Level of Service (LOS) D or better for all intersections and roadways.

Policy C-1.3: Require that new development and any proposal for an amendment to the Land Use Element of the General Plan demonstrate that traffic service levels meeting established General Plan standards will be maintained on arterial and collector streets.

Policy C-1.4: Continue to require new development to contribute to the financing of street improvements, including formation of roadway maintenance assessment districts, required to meet the demand generated by the project.

Policy C-1.5: Ensure that new development makes provisions for street maintenance through appropriate use of gas tax and formation of maintenance assessment districts.

Policy C-1.6: Discourage diversion of traffic to local streets by providing maximum capacity on arterial streets and locating high traffic-generating uses on or near arterial frontages.

Policy C-1.7: Design roadway capacities to adequately serve planned land uses.

Policy C-1.10: Encourage car-pooling, at government offices, business, schools, and other facilities, to reduce the number of vehicles using the roadway system.

Policy C-2.2: Cooperate with Caltrans in making improvements to U.S. Highway 101 and support construction of Prunedale freeway improvements by Caltrans to serve through trips, and trips to and from Salinas.

Policy C-3.2: Design development and reuse/revitalization projects to be transit-oriented to promote the use of alternative modes of transit and support higher levels of transit service.

Policy C-3.4: Support public transportation that is "bike" friendly, such as buses with bicycle racks and reduced fares for bicycle riders and provision of bicycle racks at public transportation stations.

Policy C-4.1: Continue to develop a network of on- and off-street bicycle routes to encourage and facilitate the use of bicycles for commute, recreational, and other trips. Eliminate gaps and provide connections between existing bicycle routes.

Policy C-4.3: Encourage existing businesses and require new construction to provide on-premise facilities to aid bicycle commuters, such as on-site safe bicycle parking.

Policy C-4.4: Improve the biking environment by providing safe and attractive cut-throughs, bike lanes, and bike paths for both recreational and commuting purposes.

Policy C-4.5: Where possible, ensure that roadway improvements (i.e., widening and re-striping), as well as new overpasses and underpasses, allow for safe on-street bike lanes or adequate right-lane space for bicycles.

Policy C-4.7: Encourage parking lot designs that provide for safe and secure bicycle parking.

Policy C-5.1: Increase availability of safe and well-maintained sidewalks in all areas of the City.

Policy C-5.2: Encourage all new bus stops and changes in existing bus stops to take pedestrian access into consideration.

Policy C-5.4: Encourage parking lot designs that promote pedestrian access and safety.

Policy C-4.2: Increase availability of facilities, such as bike racks and well-maintained and well-lit bike lanes that promote bicycling.

City of Salinas Traffic Improvement Program (TIP)

The City has an adopted traffic improvement program that helps fund transportation infrastructure improvements that become necessary as a result of new development. Traffic impact fees are paid by project developers to off-set the impacts of their projects on the City's circulation facilities. The fees are used for circulation network improvements that are designed to ensure that the City's circulation facilities operate at an acceptable level of service.

The City periodically updates the traffic impact fee amount to reflect costs to construct new circulation facilities or improve existing facilities. It reflects the costs of improving the circulation network to accommodate traffic volumes anticipated at buildout of the city as foreseen in the General Plan. The General Plan and the TIP identify the specific circulation network improvements that are needed. Several of the improvements are particularly relevant to the proposed project, as the traffic it generates has been found to have a significant impact on a number of circulation facilities that are included in the TIP. A project applicant's payment of the impact fee is considered to be mitigation for project impacts on those facilities provided the impacts of the project on the facilities were anticipated when the TIP was prepared.

City of Salinas Bikeways Plan

The 2002 *Salinas Bikeways Plan* includes goals and actions along with maps identifying the City's existing and proposed bikeways, bike parking facilities, bike support facilities, routes for buses with bike racks, and the design requirements for those facilities. The *Salinas* Bikeways *Plan* provides prioritized lists of projects and programs for bicycle transportation within the City of Salinas.

City of Salinas Pedestrian Plan

The 2004 *Salinas Pedestrian Plan* contains goals and strategies for improving and expanding pedestrian access and safety throughout the City. Goal 3 of the plan requires that new development be conditioned to install appropriate streets, sidewalks, pedestrian access ramps, traffic calming measures and related facilities to encourage walking. Future development within the Plan Area would be subject to such conditions.

3.10.2 METHODOLOGY

STUDY PERIODS AND SCENARIOS

This section evaluates the potential impacts to multimodal circulation that could result from implementation of the WASP, as compared to conditions that would occur without the project. With respect to the traffic analysis components of the evaluation, quantitative analyses were conducted for the following scenarios:

- Existing Conditions – Reflects the current circulation system.
- Existing Plus Project Conditions – Reflects the impact of the WASP on the transportation network, assuming that full buildout of the plan would occur absent of other growth assumptions that are included in the cumulative scenarios.
- Existing Plus Project and Central Area Specific Plan (CASP) Conditions – Incorporates the combined effect of development of the WASP and the CASP on the local transportation network.
- Cumulative Conditions – Reflects conditions under future growth assuming 2045 buildout of the City of Salinas General Plan, as well as various assumed roadway network changes.
- Cumulative Plus Project Conditions – Reflects the overall change in traffic volumes in Salinas as a result of forecasted development (under cumulative conditions), with the addition of the WASP.
- Cumulative Plus Project and CASP Conditions – Reflects the overall change in traffic volumes in Salinas as a result of forecasted development (under cumulative conditions), with the addition of the WASP and CASP.

METHODS OF ANALYSIS

LOS is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F.

Intersections

The study intersections were analyzed using methodologies published in the *Highway Capacity Manual* (HCM) (Transportation Research Board, 2010). This source contains methodologies for various types of intersection control, all of which are related to a measurement of delay in average number of seconds per vehicle.

The LOS for intersections controlled by a traffic signal were evaluated using the signalized methodology from the HCM. This methodology is based on factors including traffic volumes, green time for each movement, phasing, whether the signals are coordinated or not, truck traffic, and pedestrian activity. Average stopped delay per vehicle in seconds is used as the basis for evaluation in this LOS methodology.

The LOS for the side-street stop-controlled intersections were analyzed using the "Two-Way Stop-Controlled" intersection capacity method from the HCM. This methodology determines a LOS for

each minor turning movement by estimating the level of average delay in seconds per vehicle. Results are presented for the controlled approach with the highest delay. The ranges of delay associated with the various LOS are indicated in Table 3.10 ***1***.

TABLE 3.10 1: INTERSECTION LOS CRITERIA

LOS	*SIGNALIZED*	*TWO-WAY STOP-CONTROLLED*
A	Delay of 0 to 10 seconds. Most vehicles arrive during the green phase, so do not stop at all.	Delay of 0 to 10 seconds. Gaps in traffic are readily available for drivers exiting the minor street.
B	Delay of 10 to 20 seconds. More vehicles stop than with LOS A, but many drivers still do not have to stop.	Delay of 10 to 15 seconds. Gaps in traffic are somewhat less readily available than with LOS A, but no queuing occurs on the minor street.
C	Delay of 20 to 35 seconds. The number of vehicles stopping is significant, although many still pass through without stopping.	Delay of 15 to 25 seconds. Acceptable gaps in traffic are less frequent, and drivers may approach while another vehicle is already waiting at the side street.
D	Delay of 35 to 55 seconds. The influence of congestion is noticeable, and most vehicles have to stop.	Delay of 25 to 35 seconds. There are fewer acceptable gaps in traffic, and drivers may enter a queue of one or two vehicles on the side street.
E	Delay of 55 to 80 seconds. Most, if not all, vehicles must stop and drivers consider the delay excessive.	Delay of 35 to 50 seconds. Few acceptable gaps in traffic are available, and longer queues may form on the side street.
F	Delay of more than 80 seconds. Vehicles may wait through more than one cycle to clear the intersection.	Delay of more than 50 seconds. Drivers may wait for long periods before there is an acceptable gap in traffic for exiting side streets, creating long queues.

SOURCE: HIGHWAY CAPACITY MANUAL, TRANSPORTATION RESEARCH BOARD, 2010

Freeway

Freeway mainline segments were analyzed by Fehr & Peers using an internal spreadsheet tool based on the methodology described in Chapter 11 of HCM (Transportation Research Board, 2010). This method takes into consideration peak hour traffic volumes, free-flow speeds, percentage of heavy vehicles, and number of travel lanes. These factors are used to determine the vehicle density, measured in passenger cars per mile per lane. The operational performance of ramp junctions at certain locations on the freeway were also analyzed according to a methodology based on the Highway Capacity Manual.

Based on the methodology described in the Transportation Research Board's *Highway Capacity Manual*, ramp merge and diverge analysis determines LOS scores for freeway ramp junctions based on the density of entering and exiting traffic along the highway mainline. In this case, LOS describes the traffic and delay experienced by people driving as a result of traffic density on the ramps. It is important to note that the US. .101 northbound on-ramp and southbound off-ramp at East Boronda Road were not analyzed because they add or remove an entire lane, thus creating a weaving segment; only ramp diverge or merge segments were analyzed.

3.10.3 TRANSPORTATION SETTING

The following information describes the transportation network relevant to the proposed project.

EXISTING CIRCULATION NETWORK

This section describes these existing roadway facilities relevant to the proposed project, which are shown in Figure 3.10-1 below.

Roadway System

NORTH/SOUTH ROADWAYS

U.S. Route 101 (U.S. 101) is a north-south, four-lane freeway extending through the City of Salinas. The highway becomes a six-lane freeway between Boronda Road and Russell Road, through the north City limits of Salinas. The intersection of U.S. 101 and major roadways in Salinas are either an interchange or grade separated overpass.

San Juan Grade Road is a four-lane roadway south of Boronda Road that intersects at North Main Street and continues as two-lane roadway north of Boronda Road. The posted speed limit is 45 mph. Major intersections are controlled by traffic signals and minor intersections are controlled by side street stop control, with San Juan Grade Road as a free flow roadway. Sidewalks and striped Class II bicycle lanes are provided on San Juan Grade Road between Northridge Way and Main Street. Intermittent sidewalks are provided on some portions of the roadway between Russell Road and Rogge Village Way.

McKinnon Street is two-lane collector with bicycle lanes and sidewalks that connects with Boronda Road and Alvin Drive. The posted speed limit is 35 mph.

El Dorado Drive is a two-lane collector with bicycle lanes and sidewalks that connects with Boronda Road and Alvin Drive, with a two-way left turn lane between Harden Parkway and Alvin Drive. The posted speed limit is 25 mph.

Natividad Road is a six-lane divided major arterial from East Laurel to East Boronda Road with a posted speed limit of 45 mph. A portion of Natividad Road, between East Boronda Road and Los Coches Drive, has sound walls on each side of the roadway. Natividad Road is a two-lane rural roadway north of East Boronda Road. South of East Bernal Drive, this road is known as Sherwood Drive, a 4-lane arterial.

North Main Street is a six-lane divided major arterial between U.S. 101 in the south and East Boronda Road in the north with a posted speed limit of 35 miles per hour in this section. South of U.S. 101 to East Market Street, North Main is a four-lane undivided arterial with a two-way left turn lane. At the terminus it transitions into a couplet with Salinas Street continuing southbound, while Monterey Street provides northbound access.

Alisal Road is a two-lane rural road with a posted speed limit of 55 miles per hour. It runs from Spence Road in the east to East Alisal Street/Bardin Road at the Salinas City Limit. Alisal Road borders the Salinas Municipal Airport to the north but does not provide direct access to it.

Independence Boulevard is a divided collector roadway extending from Boronda Road to Constitution Boulevard. It provides Class II bicycle lanes along with a continuous sidewalk on the eastern side of the roadway for its entire length. Independence Boulevard is four lanes wide from Boronda Road to Nantucket Boulevard and two lanes wide south of Nantucket Boulevard.

Sanborn Road is a four-lane major arterial roadway connecting Boronda Road in the north with Abbott Street in the south. Traffic signals are provided at all major intersections and a full interchange with U.S. 101 provides access to regional destinations. Continuous sidewalks are provided on both sides of Sanborn Road for its entire length. Striped Class II bicycle lanes have been installed on the segment of Sanborn Road north of Del Monte Avenue (to Boronda Road).

EAST/WEST ROADWAYS

Russell Road begins at the Espinosa Road/Russell Road interchange with U.S. 101 and extends east to San Juan Grade Road. Russell Roadway provides two through lanes of travel (one in each direction), widening to provide additional turn lanes at intersections. The posted speed limit ranges from 35 to 45 mph. Intermittent sidewalks are provided along some sections of the facility.

Boronda Road begins at the Boronda Road interchange with U.S. 101 as a six-lane major arterial to North Main Street. East of North Main Street, Boronda Road transitions to two lanes eastbound and three lanes westbound to San Juan Grade Road. East Boronda Road then narrows to a two-lane arterial east of Dartmouth Way until it terminates at Williams Road. Traffic signals control the intersections of Boronda Road and all major arterials.

Rogge Road is a two-lane collector connecting San Juan Grade Road and Natividad Road. The speed limit ranges from 55 mph to 25 mph (school zone). Sidewalks and a striped Class II bicycle lane are provided on the section of Rogge Road between Natividad Road and La Joya Elementary School. Intermittent facilities are provided west of La Joya Elementary.

Williams Road is a four-lane divided arterial with left-turn lanes between Del Monte Avenue and Freedom Parkway. Between Del Monte Avenue and East Alisal Street, Williams Road is a four-lane arterial with a center turn lane and left turn lanes. There is a painted bicycle lane between Freedom Parkway and Bardin Way.

Constitution Boulevard is a divided four-lane minor arterial roadway extending from Laurel Drive to Boronda Road. The facility provides striped Class II bicycle lanes and sidewalks on both sides of the roadway.

Truck Routes

U.S. 101 and city-designated truck routes serve the primary industrial areas of the community. These roads are intended to move goods efficiently within the City, between outlying agricultural uses, and

packing/distribution centers. Additionally, they serve to separate truck traffic from local streets where the larger vehicles may conflict with other uses.

Aside from U.S. 101, the following roads in part or in whole serve as truck routes on City streets:

- Blanco Road
- Davis Road
- Boronda Road
- Williams Road
- Alisal Street
- Skyway Boulevard
- Airport Boulevard
- Sanborn Road
- Laurel Drive

As shown in Figure 3.10-2, these roads combine to form concentric rings that provide access to existing industrial uses and shipping centers throughout the City.

Pedestrian Facilities

Pedestrian facilities consist of sidewalks, curb ramps, crosswalks, and off-street paths, among other things. These facilities should provide safe and convenient routes for people walking to traverse the City. Pedestrian facilities are typically identified in the jurisdiction's General Plan as part of the transportation or circulation element, along with any proposed improvements or extensions to the existing pedestrian network. Policies and programs relating to walking in Salinas are defined in the City of Salinas Circulation Element Goal C-5 and the 2004 *Salinas Pedestrian Plan*.

Pedestrian facilities exist in Salinas to varying degrees of comprehensiveness. Improved pedestrian facilities typically correspond to recent development, while roads adjacent to agricultural uses or undeveloped lots typically do not provide pedestrian facilities, which is common in urbanizing communities. Near the project area, wider sidewalks were more common in the presence of schools.

Pedestrian facilities relevant to the proposed project areas are listed below:

- **San Juan Grade Road** has intermittent facilities on the east and west sides of the street between Boronda Road and Rogge Road.
- **East Boronda Road** has a continuous southerly sidewalk for its entire length of approximately four miles from Williams Road and San Juan Grade Road, in the form of a curvilinear path – sometimes with landscaped vegetation – that parallels the roadway. The path is approximately 9 feet wide from Williams Road to San Juan Grade Road. Sidewalk switches to the north side of the road between San Juan Grade and North Main Street.

- **McKinnon Street** is equipped with approximately 9-foot sidewalks on the western side between Boronda Road and East Alvin Drive. Western side has an approximately 9-foot sidewalk between East Alvin Drive that narrows into approximately five feet approximately 400 feet south of Westminster Drive. McKinnon Street does not have sidewalks for 1,000 feet north of Boronda in the proximity of McKinnon Elementary School.
- **Natividad Road** has sidewalks are present on at least one side of the street between East Laurel Drive and Boronda Road. There are no sidewalks present north of Boronda Road.
- **Rogge Road** has been recently improved between San Juan Grade Road and Jasper Way. On this section, the sidewalk on the north and south side of the street. The sidewalk is approximately ten feet wide; the southern sidewalk narrows to approximately five feet west of Rogge Village Loop. No sidewalks are present east of Jasper Way.
- **Williams Road** has continuous sidewalks present between Alisal Street and Freedom Parkway, where it passes through entirely urban land uses. In the proximity of Alisal High School, the sidewalk widens and parallels the road in a curvilinear fashion similar to the facility on Boronda Road. Between Freedom Parkway and Boronda Road, the sidewalk is only present on the north side of the street, in correlation with the residential land use present there; the south side of the street is agricultural use. North of Boronda Road, the adjacent land use is entirely agricultural, and no sidewalks are present.
- **Old Stage Road** is a rural road serving mostly agricultural uses. It does not have any sidewalks.

Existing pedestrian facilities may have barriers in the form of signposts, utility poles, or overgrown vegetation. Such barriers can also provide challenges to the access requirements for those with disabilities, as mandated in Americans with Disabilities Act (ADA). As parcels are developed and required to install sidewalks, there can also be gaps in the sidewalk system when adjacent parcels are not redeveloped or vacant.

BICYCLE FACILITIES

Bicycle facilities consist of paths (Class I), lanes (Class II), and routes (Class III). Bicycle paths are paved trails that are separate from roadways. Bicycle lanes are separate areas on roadways designated for bicycle use by striping, pavement legends, and signs. Bicycle routes are roadways designated for bicycle use by signs only, but may not include substantial width for bicycle travel. Like pedestrian facilities, bicycle networks are typically included in the General Plan, along with any proposed improvements or extensions. The list of existing bicycle facilities is summarized below and shown on Figure 3.10-3 based on the 2002 *Salinas Bicycle Plan* and cross-checked against field observations.

CLASS I SHARED-USE PATHS

- Rossi Rico Parkway
- Natividad Creek Park Trail
- Gabilan Creek Bike Path
- Front-Sherwood Underpass

CLASS II BICYCLE LANES

- Williams Road
- Freedom Parkway
- North Sanborn Road between Del Monte Ave and East Boronda Road
- Constitution Boulevard
- Independence Boulevard
- East Boronda Road between Williams Road and North Davis Road
- North Davis Road between Boronda Road and SR 183
- South Davis Road between SR 183 to Blanco Road
- Nantucket Boulevard
- Rider Avenue
- Hemingway Drive
- El Dorado Drive
- Harden Parkway
- McKinnon Street
- East Alvin Drive between Kip Drive and North Main Street
- North Main Street between East Alvin Drive and San Juan Grade Road
- San Juan Grade Road between East Boronda Road and North Main Street
- Harden Parkway
- East and West Rossi Street
- Pajaro Street Between East Market Street and East San Joaquin Street
- South Main Street between East San Joaquin Street and Stephanie Drive
- East Alisal Street between Front Street and North Madeira Avenue
- Work Street between East Alisal Street and John Street
- Abbott Street between John Street and Harkins Road
- Front Street between East Alisal Street and John Street
- Laurel Drive between Constitution Boulevard and Saint Edwards
- Sherwood Drive

CLASS III ROUTES

These facilities are ubiquitous throughout Salinas neighborhoods and are typically located on low-volume local streets.

Existing Transit Service

MST provides fixed-route bus service in Monterey County and in the City of Salinas. Most routes in Salinas follow a hub-and-spoke service pattern, originating and returning to the Salinas Transit Center in downtown Salinas. Express and commuter busses are also provided to regional destinations in Monterey and Santa Cruz counties. As of 2014, MST experiences about 14,000 passenger trips on an average weekday. Figure 3.10-4 shows a map of transit bus service in Salinas.

The proposed project is served by MST routes 41, 45, 49, 72 and 95. Many of these routes start at the Downtown Salinas Transit Center and end at the Northridge Mall, in the northwest corner of the city. Table 3.10-2 below summarizes the hours of operation and service frequencies of these routes. Routes 45, 72 and 95 have stops on East Boronda Road near San Juan Grade Road, McKinnon Street, El Dorado Drive, Shaker Square (a retail shopping center), Natividad Road, and Independence Road.

TABLE 3.10-2: EXISTING TRANSIT SERVICE

ROUTE #	*ROUTE NAME/DESTINATION*	*WEEKDAY*	*SATURDAY*	*SUNDAY*	*COMMUTE HEADWAY (PEAK HOUR)*
41	Northridge via East Alisal	5:17 AM – 10:16 PM	5:55 AM -10:14 PM		30 Minutes
45	Northridge via East Market	Daily: 7:00 AM – 7:00 PM			75 minutes
49	Santa Rita via Northridge	Daily: 6:15 AM – 10:00 PM			60 Minutes
72	Presidio – North Salinas Express	6:00 AM – 6:15 PM	n/a		1 AM Trip/1 PM Trip
95	Northridge – Williams Ranch	Daily: 7:02 AM – 5:20 PM			120 Minutes

Source: Fehr & Peers, 2018

3.10.4 EXISTING CONDITIONS

Study intersections, highway segments, and highway ramp junctions were selected based on the proposed project location, expected directions of travel to/from the site, and the amount of traffic that will be added to the transportation network.

STUDY INTERSECTIONS

Figure 3.10-5 shows a map of the study intersections. These are also listed below.

1. U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road
2. U.S. 101 Northbound Ramps/Crazy Horse Canyon Road
3. U.S. 101 Northbound Ramps/U.S. 101 Southbound Ramps/Sala Road
4. Harrison Road/Sala Road/Driveway
5. Crazy Horse Canyon Road/San Juan Grade Road
6. Hebert Road/San Juan Grade Road
7. Old Stage Road/Hebert Road
8. North Main Street/Harrison Road/Russell Road
9. Van Buren Avenue/Russell Road
10. San Juan Grade Road/Rogge Road
11. San Juan Grade Road/Russell Road
12. Natividad Road/Rogge Road
13. Natividad Road/Russell Road (future extension)
14. San Juan Grade Road/Van Buren Avenue
15. U.S. 101 Southbound Ramps/Boronda Road
16. U.S. 101 Northbound Ramps/Boronda Road
17. North Main Street/Boronda Road
18. North Main Street/San Juan Grade Road
19. San Juan Grade Road/Boronda Road
20. McKinnon Street/Boronda Road
21. El Dorado Drive/Boronda Road
22. Natividad Road/Boronda Road
23. Independence Boulevard/Boronda Road
24. Hemingway Drive/Boronda Road
25. Old Stage Road/Constitution Boulevard (future extension)
26. North Main Street/East Alvin Drive
27. Natividad Road/East Alvin Drive
28. Independence Boulevard/Constitution Boulevard
29. Boronda Road/Constitution Boulevard
30. U.S. 101 Southbound Ramps/West Laurel Drive
31. U.S. 101 Northbound Ramps/West Laurel Drive
32. North Main Street/West Laurel Drive
33. Natividad Road/East Laurel Drive

34. Constitution Boulevard/East Laurel Drive
35. North Sanborn Road/Boronda Road
36. Old Stage Road/Williams Road/Private Road
37. North Main Street/East Bernal Drive
38. Sherwood Drive/Natividad Road/East Bernal Drive/La Posada Way
39. East Laurel Drive/North Sanborn Road
40. Williams Road/Boronda Road
41. Freedom Pkwy/Williams Road
42. Bardin Road/Bardin Way/Williams Road
43. East Market Street/Williams Road
44. John Street/Williams Road/E Alisal Street
45. South Sanborn Road/North Sanborn Road/John Street
46. Bardin Road/East Alisal Street/Driveway
47. Skyway Boulevard/Airport Boulevard
48. South Sanborn Road/North Sanborn Road/East Alisal Street
49. West Laurel Drive/Adams Street
50. North Davis Road/West Laurel Drive
51. East Front Street/Sherwood Drive/Market Street
52. East Market Street/East Front Street
53. South Davis Road/Blanco Road
54. Monterey Street/Monterey Street/East Market Street
55. Salinas Street/North Main Street/West Market Street/East Market Street
56. South Main Street/West Blanco Road/East Blanco Road

FREEWAY SEGMENTS

1. U.S. 101 from San Juan Road to Crazy Horse Canyon Road
2. U.S. 101 from Crazy Horse Canyon Road to San Miguel Canyon Road
3. U.S. 101 from San Miguel Canyon Road to SR 156
4. U.S. 101 from SR 156 to Sala Road
5. U.S. 101 from Sala Road to Boronda Road
6. U.S. 101 from Boronda Road to W. Laurel Drive
7. U.S. 101 from W. Laurel Drive to N. Main Street/SR 183
8. U.S. 101 from N. Main Street/ SR 183 to E. Market Street
9. U.S. 101 from SR 68/John Street to S. Sanborn Road
10. U.S. 101 from S. Sanborn Road to Abbott Street

FREEWAY RAMP JUNCTIONS

1. U.S. 101 and East Boronda Road Southbound Loop On-Ramp
2. U.S. 101 and East Boronda Road Southbound On-Ramp
3. U.S. 101 and East Boronda Road Northbound Loop On-Ramp
4. U.S. 101 and East Boronda Road Northbound Off-Ramp
5. U.S. 101 and West Laurel Drive Southbound Off-Ramp
6. U.S. 101 and West Laurel Drive Southbound On-Ramp
7. U.S. 101 and West Laurel Drive Southbound Loop On-Ramp
8. U.S. 101 and West Laurel Drive Northbound On-Ramp
9. U.S. 101 and West Laurel Drive Northbound Loop On-Ramp
10. U.S. 101 and West Laurel Drive Northbound Off-Ramp

3.10.5 NO PROJECT CONDITIONS

U.S. 101 and East Boronda Road Southbound Fehr & Peers collected intersection turning movement and U.S. 101 segment volumes were collected on midweek days in January, February, and April of 2016. Volumes were collected in January and February to capture school-related travel. However, in order to account for possible seasonal variances in traffic volume due the local context of Salinas, a volume adjustment factor for these winter counts was considered. Using prior data collected by the City from the summer of 2015, winter counts were found to be larger than summer counts by about 2 percent. Such a variance is likely due to simple day-to-day fluctuations in travel behavior, and as such an adjustment factor for winter volumes was ultimately not used.

Existing with No Project Conditions Intersection Operations Analysis

Existing level of service levels were evaluated at 54 intersections in Salinas, presented in **3.10-3**, below. Intersections that function below the minimum threshold (LOS D) in either the morning or evening peak period are shown in bold.

TABLE 3.10-3: EXISTING WITH NO PROJECT INTERSECTION LEVEL OF SERVICE

Int. No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
1	U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road	SSSC	6.9 (15.2)	A (C)	11.2 (17.6)	B (C)
2	U.S. 101 Northbound Ramps/Crazy Horse Canyon Road	SSSC	3.4 (12)	A (B)	2.9 (13.3)	A (B)

TABLE 3.10-3: EXISTING WITH NO PROJECT INTERSECTION LEVEL OF SERVICE

Int. No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
3	U.S. 101 Northbound Ramps/U.S. 101 Southbound Ramps/Sala Road	AWSC	8.6	A	10.1	B
4	Harrison Road/Sala Road	Signal	8.7	A	9.2	A
5	Crazy Horse Canyon Road/San Juan Grade Road	AWSC	9.2	A	11.1	B
6	Hebert Road/San Juan Grade Road	SSSC	5.9 (11.3)	A (B)	7.1 (21.6)	A (C)
7	Old Stage Road/Hebert Road	SSSC	0.6 (11.7)	A (B)	0.6 (13.5)	A (B)
8	North Main Street/Harrison Road/Russell Road	Signal	16.9	B	21.5	C
9	Van Buren Ave/Russell Road	Signal	17.5	B	18.8	B
10	San Juan Grade Road/Rogge Road	AWSC	17.4	C	13.4	B
11	San Juan Grade Road/Russell Road	Signal	14.9	B	13.1	B
12	Natividad Road/Rogge Road	SSSC	5.7 (10.4)	A (B)	5.2 (12.4)	A (B)
14	San Juan Grade Road/Van Buren Avenue	SSSC	4.6 (29.8)	A (D)	3.1 (19.4)	A (C)
15	U.S. 101 Southbound Ramps/Boronda Road	Signal	6	A	7.1	A
16	U.S. 101 Northbound Ramps/Boronda Road	Signal	7.9	A	18.1	B
17	North Main Street/Boronda Road	Signal	47.3	D	46.2	D
18	North Main Street/San Juan Grade Road	Signal	11.3	B	22.5	C
19	San Juan Grade Road/Boronda Road	Signal	39.5	D	42.7	D
20	McKinnon Street/Boronda Road	Signal	26.5	C	24.8	C
21	El Dorado Drive/Boronda Road	Signal	12.7	B	8.9	A
22	Natividad Road/Boronda Road	Signal	36.1	D	54.9	D
23	Independence Boulevard/Boronda Road	Signal	14.3	B	10.7	B

TABLE 3.10-3: EXISTING WITH NO PROJECT INTERSECTION LEVEL OF SERVICE

Int. No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
24	**Hemingway Drive/Boronda Road**	**SSSC**	**17.9 (114.3)**	**C (F)**	**5.6 (99.4)**	**A (F)**
26	North Main Street/East Alvin Drive	Signal	41.2	D	40.9	D
27	Natividad Road/East Alvin Drive	Signal	14.4	B	12.7	B
28	Independence Boulevard/Constitution Boulevard	Signal	21.4	C	20.4	C
29	Boronda Road/Constitution Boulevard	Signal	8.5	A	10.4	B
30	U.S. 101 Southbound Ramps/West Laurel Drive	Signal	9.5	A	11.7	B
31	U.S. 101 Northbound Ramps/West Laurel Drive	Signal	6.6	A	12.2	B
32	**North Main Street/West Laurel Drive**	**Signal**	38.6	D	**56.7**	**E**
33	Natividad Road/East Laurel Drive	Signal	54.9	D	48.9	D
34	East Laurel Drive/Constitution Boulevard	Signal	17.5	B	22.9	C
35	**North Sanborn Road/Boronda Road**	**SSSC**	**19.3 (123.6)**	**B (F)**	**7.3 (38.4)**	**A (E)**
36	Old Stage Road/Williams Road/Private Road	SSSC	5.1 (10.2)	A (B)	4.0 (11.6)	A (B)
37	North Main Street/East Bernal Drive	Signal	45.4	D	40.1	D
38	**Sherwood Drive/Natividad Road/E Bernal Drive/La Posada Way**	**Signal**	41.9	D	**60**	**E**
39	East Laurel Drive/North Sanborn Road	Signal	20.1	C	26.5	C
40	Williams Road/Boronda Road	SSSC	7.2 (15.4)	A (C)	6.8 (25.9)	A (D)
41	Freedom Parkway/Williams Road	Signal	19.3	B	20.4	C
42	Bardin Road/Bardin Way/Williams Road	Signal	16.8	B	19.5	B
43	East Market Street/Williams Road	Signal	19.7	B	29.1	C

TABLE 3.10-3: EXISTING WITH NO PROJECT INTERSECTION LEVEL OF SERVICE

Int. No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
44	John Street/Williams Road/East Alisal Street	Signal	12.3	B	13	B
45	South Sanborn Road/North Sanborn Road/John Street	Signal	44.6	D	25.5	C
46	Bardin Road/East Alisal Street/Driveway	AWSC	9.9	A	9.8	A
47	Skyway Boulevard/Airport Boulevard	SSSC	2.6 (9.5)	A (A)	10.9 (14.9)	B (B)
48	South Sanborn Road/North Sanborn Road/East Alisal Street	Signal	25.6	C	31.5	C
49	West Laurel Drive/Adams Street	Signal	12.7	B	17	B
50	North Davis Road/West Laurel Drive	Signal	25.9	C	43.7	D
51	East Front Street/Sherwood Drive/Market Street	Signal	11.6	B	13.9	B
52	East Market Street/East Front Street	Signal	8.8	A	9.1	A
53	South Davis Road/Blanco Road	Signal	38.3	D	45.5	D
54	Monterey Street/Monterey Street/East Market Street	Signal	17.1	B	25.2	C
55	Salinas Street/North Main Street/West Market Street/East Market Street	Signal	28.4	C	29.5	C
56	South Main Street/West Blanco Road/East Blanco Road	Signal	37	D	40.9	D

Source: Fehr & Peers, 2018
AWSC = All-Way Stop Control, SSSC = Side Street Stop Control, LOS = Level of Service
Notes:

- *Side-street stop-controlled (SSSC) intersection LOS is reported as: overall intersection delay and LOS (worst-case stop-controlled movement or approach delay and LOS).*
- *All-way stop controlled (AWSC) LOS is reported for the overall intersection, based on average delay per vehicle*

Currently, four intersections operate at a level of service below the City threshold of LOS D or better during the morning and/or evening peak period. Of these, only two intersections function at LOS F in either peak period: Hemingway Drive & Boronda Road, and North Sanborn Road & Boronda Road.

Existing with No Project Conditions Freeway Mainline Capacity Analysis

Traffic volume observations were recorded at ten locations along U.S. 101 by Fehr & Peers in the spring of 2016, during the same period as the intersection turning movement counts. For freeway mainline segments, level of service (LOS) is a function of traffic density and describes the resulting delay experienced by people driving. LOS scores are compared to the minimum operating standards defined by the Monterey County CMP in Table 3.10-4 and Table 3.10-5 below.

TABLE 3.10-4: AM EXISTING WITH NO PROJECT FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Segment	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
San Juan Road to Crazy Horse Canyon Road	1,949	16.4	B	1,894	15.9	B
Crazy Horse Canyon Road to San Miguel Canyon Road	2,013	16.9	B	1,882	15.8	B
San Miguel Canyon Road to SR 156	2,953	16.5	B	2,406	20.2	C
SR 156 to Sala Road	2,065	17.3	B	1,824	15.3	B
Sala Road to Boronda Road	2,613	14.6	B	1,659	9.3	A
Boronda Road to Laurel Drive	2,924	24.7	C	1,831	15.4	B
Laurel Drive to N. Main Street/SR 183	2,843	24	C	1,726	14.5	B
N. Main Street/SR 183 to E. Market Street	2,858	24.1	C	1,811	15.2	B
SR 68 John Street to S. Sanborn Road	1,934	16.2	B	1,508	12.6	B
S. Sanborn Road to Abbott Street	1,668	14	B	1,526	12.8	B

[1] *Density Reported in Passenger Cars per Mile per Lane*
Source: Fehr & Peers, 2018

TABLE 3.10-5: PM EXISTING WITH NO PROJECT FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Segment	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
San Juan Road to Crazy Horse Canyon Road	2,624	22	C	2,188	18.4	C
Crazy Horse Canyon Road to San Miguel Canyon Road	2,278	19.1	C	2,208	18.5	C
San Miguel Canyon Road to SR 156	3,061	17.1	B	3,120	26.7	D
SR 156 to Sala Road	2,404	20.2	C	2,456	20.6	C
Sala Road to Boronda Road	2,562	14.3	B	2,453	13.7	B
Boronda Road to Laurel Drive	2,696	24.7	C	3,124	26.7	D
Laurel Drive to N. Main Street/SR 183	2,553	21.4	C	3,300	28.7	D
N. Main Street/SR 183 to E. Market Street	2,638	22.1	C	3,465	30.7	D
SR 68 John Street to S. Sanborn Road	2,039	17.1	B	2,370	19.9	C
S. Sanborn Road to Abbott Street	1,777	14.9	B	2,327	19.5	C

[1] *Density Reported in Passenger Cars per Mile Per Lane*
Source: Fehr & Peers, 2018

All of the analysis segments operate at or above the minimum level of service standards for highway facilities as set by the CMP, LOS D or better.

Existing with No Project Conditions Freeway Ramp Junctions Capacity Analysis

The existing operational performance of merging and diverging ramp junctions was analyzed at the Boronda Road and Laurel Street interchanges of U.S. 101. Ramp junction merge and diverge movement level of service results for the northbound and southbound segments, in the morning and evening peak periods, are shown and compared to minimum operational standards in Table 3.10-6 and Table 3.10-7**,** below.

TABLE 3.10-6: AM EXISTING WITH NO PROJECT RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
Boronda Road	Loop On-Ramp	25.4	C	Loop On-Ramp	12	B
	On-Ramp	26.4	C	Off-Ramp	20.8	C
West Laurel Drive	Off-Ramp	31.1	D	On-Ramp	18.5	B
	On-Ramp	24.6	C	Loop On-Ramp	15	B
				Off-Ramp	19.5	B

Source: Fehr & Peers, 2018

TABLE 3.10-7: PM EXISTING WITH NO PROJECT RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
Boronda Road	Loop On-Ramp	23.1	C	Loop On-Ramp	19.4	B
	On-Ramp	24.3	C	Off-Ramp	33.5	D
West Laurel Drive	Off-Ramp	28.9	D	On-Ramp	30	D
	On-Ramp	21	C	Loop On-Ramp	26.3	C
				Off-Ramp	34	D

Source: Fehr & Peers, 2018

Currently, all ramp junction merge and diverge movements operate at acceptable levels of service during the morning and evening peak periods.

3.10.6 PROJECT CONDITIONS

In the Transportation Impact Analysis developed by Fehr & Peers, the WASP is considered to be the proposed project. However, the CASP is considered simultaneously in some existing and future growth scenarios in order to evaluate the impact of WASP together with CASP, as well as the baseline growth assumptions. The next two sections describe each plan in more detail.

WEST AREA SPECIFIC PLAN

The West Area Specific Plan (WASP) encompasses approximately 797 acres. It is relatively flat land bounded by the future Russell Road and Rogge Road extensions to the north, Natividad Road to the

east, Boronda Road to the south, and San Juan Grade Road to the west. Regional access to the site is provided by State Route 101, located 0.5 mile west of the project site, and by Boronda Road, which connects to State Route 101 and forms the south boundary of the WASP. In the southwest portion of the site is the existing McKinnon Elementary School, which is surrounded by agricultural fields and is not a part of the project. Two small clusters of buildings supporting the agricultural operations are located on the project site. A new high school is under construction in the northwest portion of the site.

For the purposes of this analysis, the following assumptions were made regarding school enrollment in WASP:

- There will be 600 students enrolled in each of the three elementary schools, totaling 1,800 students.
- The middle school will contain the average California enrollment of 803 students.
- The High School is projected to have 1,534 students and a commensurate number of staff

The new schools are expected to primarily serve students living in the project area and/or areas immediately surrounding.

Internal Circulation Network

According to the *West Area Specific Plan,* the locations of collector and local streets are approximate and the local streets are shown for illustrative purposes only. Arterial streets may be constructed in advance of residential subdivision development, as needed for access and public safety.

Local streets within residential subdivisions will be designed to emphasize internal circulation and to discourage unsafe speeds through the incorporation of traffic calming features. The overall street pattern in the residential areas is intended to be simple in design and form an interconnected multi-modal network that includes automobile, bicycle, and pedestrian routes that provide direct connections to local destinations. Residential streets will provide for both intra-neighborhood and inter-neighborhood connections and thus will knit neighborhoods together and not form barriers between them.

All residential developments will be designed to provide convenient pedestrian and bicycle access to schools, parks, and open space areas. Sidewalks or pedestrian pathways will be provided on both sides of all streets, except for the linear park streets. In locations where pathways bisect blocks or clusters of homes, the intrusion upon the privacy of residential property shall be minimized. Bicycle facilities will be located within designated arterial and collector street rights-of-way as well as on the southerly greenway shared-use path. Safe and convenient crossings of all major roads should be provided for pedestrians and bicyclists. Pedestrian trails and pathways are encouraged within and adjacent to open space areas designated for detention and retention basins, to the extent possible.

Bus shelters and turnouts, designed in accordance with Monterey Salinas Transit improvement standards, will be located along arterial streets at key residential neighborhood entrances and adjacent to the Village Center as shown on the WASP public transit plan. All transit routes and stops/shelters in the Specific Plan area will be subject to approval by Monterey Salinas Transit and the City. Transit stop locations to serve the project area will be coordinated with Monterey Salinas Transit as it develops interim and ultimate transit routing plans.

The streets that are proposed as part of the WASP circulation system vary in design, depending on the land use the streets will serve and the desired design character. Some of the proposed streets and their designs are described below.

COMMUNITY PARK PROMENADE STREET 1: EL DORADO DRIVE

El Dorado Drive includes bicycle lanes extending the existing bicycle lanes on El Dorado Drive south of Boronda into the Specific Plan area and north to Rogge Road. On-street parking is planned on the Westerly (community park) side of the street for a total of 41 feet curb to curb. The 13 feet of parkway on the west side of the roadway may include portions of the meandering 10-foot shared-use pathway located within the community park.

COMMUNITY PARK PROMENADE STREET 2: ROAD A

Road A is a bicycle route connecting bike lanes on Boronda and Russell Roads. On-street parking is provided on both sides of the roadway for a total of 38 feet curb to curb. This relatively narrower roadway section combined with bulb-outs at the key intersections is to function as a traffic calming feature to make this a lower speed street adjacent to the community park.

COMMUNITY PARK PROMENADE STREET 3: ROAD G

Road G is part of the northerly greenway street (connector) that extends east-west through the project area. It is also a bicycle route that connects bicycle lanes on San Juan Grade Road easterly to bicycle lanes on McKinnon Street, El Dorado Drive, Natividad Road, Independence Boulevard, Constitution Boulevard, Sanborn Road, and Williams Road. On-street parking is provided on both sides of the roadway for a total of 38 feet curb to curb. This relatively narrower roadway section combined with bulb-outs at the key intersections is to function as a traffic calming feature to make this a lower speed street adjacent to the community park.

COMMUNITY PARK PROMENADE STREET 4: ROAD C

Road C is part of the southerly greenway street (connector) that extends through the Specific Plan area. It is a bicycle route and, similar to Road G, connects bicycle lanes from San Juan Grade to Williams Road. This is also the location of the greenway, which is a shared-use pathway within an approximate 18-foot minimum parkway on the north side of the street. On-street parking is provided on both sides of the roadway for a total of 38 feet curb to curb. As with the other street sections around the community park, this is to function as a traffic calming feature.

COLLECTOR FEATURE STREET SECTION 1: MCKINNON STREET AND EL DORADO DRIVE

McKinnon Street and the portion of El Dorado Drive north and south of the community park include bicycle lanes that extend existing bicycle lanes on McKinnon Street and El Dorado Drive south of Boronda Road into the Specific Plan area and north to Russell and Rogge Roads. No on-street parking is provided on these roadways.

COLLECTOR FEATURE STREET SECTION 2: ROAD A

Road A north and south of the community park is part of a bicycle route connecting bicycle lanes on Boronda and Russell Roads. On-street parking is provided on both sides of the roadway for a total of 38 feet curb to curb. Widening of the curb-to-curb dimension to allow for turns is expected in the vicinity of the Mixed Use Village Center.

COLLECTOR FEATURE STREET SECTION 3: STREET C

Street C is part of the southerly greenway street (connector) that extends east and west through the entire project area. It is a bicycle route that connects bicycle lanes on San Juan Grade Road easterly to bicycle lanes on McKinnon Street, El Dorado Drive, Natividad Road, Independence Boulevard, Constitution Boulevard, Sanborn Road, and Williams Road. This is also the location of the southerly greenway, a shared-use pathway within an approximate 18-foot minimum parkway on the north side of the street. On-street parking is provided on both sides of the roadway for a total 38 feet curb to curb.

COLLECTOR FEATURE STREET SECTION 4: ROAD G

Road G is part of the northerly greenway street (connector) that extends east-west through the entire project area. It is a bicycle route and, like Street C, connects bicycle lanes from San Juan Grade Road to Williams Road. The 15-foot parkway on the south side of Road G and the 8-foot landscape easement includes a 7-foot community trail. On-street parking is provided on both sides of the roadway for a total of 38 feet curb to curb.

RUSSELL ROAD

The extension of Russell Road into the Specific Plan area will be improved as a major arterial. Russell Road will have four 12-foot lanes, two in each direction, separated by a median 22 feet wide. Trees and other landscaping will be planted on this median. The two traffic lanes in each direction will be located on pavement 30 feet wide from curb to curb, for a total of 60 feet of pavement width. Both sides of Russell Road will have a parkway that is 8 feet wide, a trail 8-foot wide, and an 8-foot wide landscaped area between the trail and a perimeter wall on the adjacent property line.

ROGGE ROAD

Rogge Road will be improved as a two-lane roadway featuring a 34 foot wide cross section within a 84 foot wide right-of-way along the Specific Plan's frontage. Shared bicycle-pedestrian trails would be provided along both sides of the roadway.

CENTRAL AREA SPECIFIC PLAN

The CASP is approximately 820 acres and shares the boundary of Natividad Road with the WASP. CASP is generally bounded by Boronda Road, the future extension of Constitution Boulevard, Old Stage Road, the future Russell Road extension, and Natividad Road.

Like the WASP, the CASP is also a master-planned community based on New Urbanism principles. The new community proposes a minimum of 3,419 and a maximum of 3,983 new homes and apartments. In addition to the residential uses, approximately 250,000 square feet of retail and office uses may also be built within the Village Center Mixed Use Zone and a portion of the Neighborhood General-2 (NG-2) Zones. Approximately 100,000 square feet of retail or office square footage could be converted to an additional 100 residential units. These residential and commercial uses will be built within the Plan's Residential/Mixed Use Zoning Districts. Approximately 183 net acres of public streets are included in the plan.

Three school sites are proposed within the CASP on three parcels for a combined 48 acres. They include a middle school (7th grade through 8th grade) on 18 acres, an elementary school (kindergarten through 6th grade) on 12 acres, and another elementary/middle school (kindergarten through 8th grade) on 18 acres. Also proposed are an approximately 22,000 square foot library on 2 acres and a fire station on 1.5 acres.

For the purposes of analysis, the following land use assumptions have been made:

- Residential: full buildout of 3,983 dwelling units
- Mixed Use Commercial: 125,000 square feet of office, 125,000 square feet of retail
- Schools: two elementary schools with 600 students enrolled in each and one middle school with 803 students enrolled
- Other: 50 acres of parks, 30 acres of utilities, 22,000 square feet of libraries

3.10.7 PROJECT CHARACTERISTICS

Buildout of the Specific Plan includes the construction of new roadways, intersections, transit, pedestrian, and bicycle facilities to effectively manage traffic generated by the various land use changes within the Specific Plan Area boundaries. Buildout of the Specific Plan also includes a circulation system that aligns with the existing and planned roadway network beyond the boundaries of the Specific Plan Area.

PROJECT CONDITIONS NETWORK CHANGES

A number of changes to the network under the project conditions scenarios were assumed. Changes to the network in the Existing plus WASP scenario are also included in the Existing Plus Project and CASP scenario. The assumptions are detailed below.

Existing plus Project Network Assumptions

- Widen Boronda Road to 4 lanes from San Juan Grade to Natividad Road
    - Boronda Road & McKinnon Street – 2 lane roundabout
    - Boronda Road & El Dorado Drive – 2 lane roundabout
    - Boronda Road & Natividad Road – 3 lane roundabout
- Widen Russell Road to 4 lanes from San Juan Grade to Natividad Road (new road)
- Widen Natividad Road to 4 lanes from Boronda to Rogge Road
- Widen San Juan Grade Road to 4 lanes from Boronda to Rogge Road
- Add north leg at the intersection of El Dorado Drive and East Boronda Road; El Dorado Drive extends north of East Boronda Road to Rogge Road (new road).

Existing plus Project and CASP Network Assumptions

- Widen Boronda Road to 4 lanes from San Juan Grade Road to Constitution Boulevard
    - Boronda Road & Independence Boulevard – 2 lane roundabout
- Widen Russell to 4 lanes from San Juan Grade Road to Natividad Road (new road)
- Widen Natividad to 4 lanes from Boronda Road to Rogge Road
- Widen San Juan Grade to 4 lanes from East Boronda Road to Rogge Road
- Widen Old Stage Road to 4 lanes from Russell Road to Constitution Boulevard
- Extend the following roadways north of East Boronda Road: El Dorado Drive, Independence Boulevard, and Hemingway Drive (new road)
- Extend Constitution Boulevard as 4-lane arterial to Old Stage Road (new road)

It should be noted that the City of Salinas is considering the potential installation of roundabouts at additional locations on Boronda Road between Hemingway Drive and Williams Road. While this analysis assumes the widening and installation of traffic signal improvement at these locations, the installation of properly designed and sized roundabouts would offer similar levels of roadway capacity and would not change the overall conclusions of this analysis.

TRIP GENERATION

Trip generation refers to the process of estimating the amount of vehicular traffic a project might add to the local roadway network. Using available data, the expected level of vehicle trip generation during the peak one-hour periods during the morning (AM) and evening (PM) peak hours, when traffic volumes on adjacent streets are typically at their highest, was calculated.

Fehr & Peers' trip generation tool, MainStreet, was used to estimate trip generation for this project. The MainStreet application combines Institute of Transportation Engineers (ITE) methods and Big

Data to provide a more robust analysis platform as an alternative to using only the ITE Trip Generation Manual, a more traditional analysis method. The Trip Generation manual contains data primarily collected at suburban, single-use, freestanding sites, which can overestimate vehicle trip generation. This is due to an inability of traditional tools to accurately reflect the amount of internal trip linking or the level of trips made by transit, biking, and/or walking. This can result in increased development costs due to oversized infrastructure and skewed perceptions of likely impacts. MainStreet begins with ITE trip generation estimates, but then adjusts those estimates to account for internal trips. MainStreet also recognizes that traffic generation relates closely to the density, diversity, design, destination accessibility, transit proximity, and scale of development, providing a more accurate and realistic trip generation estimate. Because the proposed project would use New Urbanist design principles that include mixed use development, MainStreet tool is more appropriate than trip generation rates which strictly rely on the ITE methodology.

Trip generation estimates for WASP are presented below in Table 3.10-8. Trip generation estimates for CASP are presented in Table 3.10-9.

TABLE 3.10-8: WASP TRIP GENERATION

Land Use	Units	Quantity	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
				In	Out	Total	In	Out	Total
Elementary School	Students	1,800	2,322	446	365	810	132	138	270
Middle School	Students	803	1,301	239	195	434	63	65	128
High School	Students	1,534	2,623	449	211	660	94	105	199
General Office Building	1000 square feet gross floor area	143	1,576	224	31	255	40	198	238
Supermarket	1000 square feet gross floor area	57	5,828	120	74	194	275	265	540
Shopping Center	1000 square feet gross floor area	371	15,862	221	136	357	661	717	1,378
Single-Family Detached Housing	Dwelling Units	1,361	12,957	241	722	962	857	504	1,361
Condominium/ Townhouse	Dwelling Units	2,888	16,779	129	632	761	635	313	948
Apartment	Dwelling Units	91	605	9	37	46	44	24	68
City Park	Acres	50	94	125	99	224	99	75	174

Utilities	Acres	37		57	34	91	22	26	48
Net Raw Project Trips			*59,947*	*2,260*	*2,536*	*4,794*	*2,922*	*2,430*	*5,352*
Internal Capture			*-5,455*	*-348*	*-391*	*-738*	*-593*	*-493*	*-1,086*
External Walk, Bike, and Transit			*-2,398*	*-136*	*-152*	*-288*	*-143*	*-119*	*-262*
Total Reductions			*-7,853*	*-484*	*-543*	*-1,026*	*-736*	*-612*	*-1,349*
Net New Project Trips			**52,094**	**1,776**	**1,993**	**3,768**	**2,186**	**1,818**	**4,003**

Source: Fehr & Peers, 2018, ITE Trip Generation Manual, Ninth Edition
Notes: See Appendix A of Appendix I of this EIR for WASP trip generation rate assumptions.

TABLE 3.10-9: CASP TRIP GENERATION

Land Use	Units	Quantity	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
				In	Out	Total	In	Out	Total
Elementary School	Students	1,200	1,548	297	243	540	88	92	180
Middle School	Students	803	1301	239	195	434	63	65	128
High School	Students	1481	2533	433	204	637	91	102	193
General Office Building	1000 square feet gross floor area	125	1379	172	23	195	32	154	186
Supermarket	1000 square feet gross floor area	25	2556	53	32	85	121	116	237
Shopping Center	1000 square feet gross floor area	200	8,540	119	73	192	356	386	742
Single-Family Detached Housing	Dwelling Units	1,200	11,424	225	675	900	756	444	1,200
Condominium	Dwelling Units	2,700	15,687	202	986	1,188	941	463	1,404
Apartment	Dwelling Units	83	552	8	34	42	33	18	51
Library	1000 square feet gross floor area	22	1237	16	7	23	77	84	161
City Park	Acres	50	76	101	79	180	80	60	140
Utilities	Acres	30	N/A	47	28	75	18	22	40

Net Raw Project Trips			46,833	1,912	2,579	4,491	2,656	2,006	4,662
Internal Capture			-4,028	-329	-444	-772	-494	-373	-867
External Walk, Bike, and Transit			-983	-69	-93	-162	-93	-70	-163
Total Reductions			-5,011	-398	-536	-934	-587	-443	-1,030
Net New Project Trips			**41,822**	**1,514**	**2,043**	**3,557**	**2,069**	**1,563**	**3,632**

Source: Fehr & Peers, 2018, ITE Trip Generation Manual, Ninth Edition
Notes: See Appendix B of Appendix I of this EIR for trip generation rate assumptions.

Fehr & Peers projected that buildout of the proposed WASP would result in a total of 52,094 net new project trips. Buildout of the CASP would result in 41,822 net new project trips.

TRIP DISTRIBUTION

New traffic generated by WASP and CASP was distributed through the roadway network using a trip distribution pattern developed using the City of Salinas Travel Demand Model. The distribution used for WASP-related traffic is shown on Figure 3.10-6**.**

3.10.8 THRESHOLDS OF SIGNIFICANCE

The following standards of significance are based on Appendix G of the CEQA Guidelines, in addition to criteria set forth by the City of Salinas, Monterey County, and Caltrans. The proposed WASP would result in a significant impact on transportation if it would:

1. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
    - Policy C-1.2 of the General Plan states that the City shall "strive to maintain traffic Level of Service (LOS) D or better for all intersections and roadways." Furthermore, Policy C-1.3 states that these standards must be maintained with the addition of new development. Significant impacts at signalized intersections are defined to occur when:
        i. The addition of project traffic causes intersection operations to degrade from an acceptable level (LOS D or better) to an unacceptable level (LOS E or worse); or
        ii. Project traffic is added to an intersection operating at an unacceptable level (LOS E or worse).

- Significant impacts at unsignalized intersections are defined to occur when:

    iii. The addition of project traffic causes intersection operations (either the intersection as a whole or the worst movement for a two-way stop-controlled intersection) to degrade to an unacceptable level and satisfy the peak-hour signal warrant from the *Manual on Uniform Traffic Control Devices* (MUTCD); or

    iv. The project's access to a major street causes a potentially unsafe situation or requires a new traffic signal or roundabout based on standard warrant criteria.

- Policy C-1.1 of the plan states that "the acceptable level of service for County roads and intersections shall be a Level of Service (LOS) D". Significant impacts at mainline freeway segments and ramp junctions are defined to occur when:

    v. The addition of project traffic causes freeway mainlines or ramp junction operations to degrade from an acceptable (LOS D or better) to an unacceptable (LOS E or worse); or

    vi. Project traffic is added to a freeway mainline or ramp junction operating at an unacceptable level (LOS E or worse).

2. Conflict with an applicable congestion management program, including, but not limited to LOS standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.

    - Significant impacts at Caltrans facilities are defined to occur when:

        i. A standard of LOS D or better not maintained (this is the standard set for Caltrans facilities in the study area by the Monterey County Congestion Management Plan, or CMP).

    - Significant impacts at mainline freeway segments and ramp junctions are defined to occur when:

        i. The addition of project traffic causes freeway mainlines or ramp junction operations to degrade from an acceptable level (LOS D or better) to an unacceptable level (LOS E or worse), or

        ii. Project traffic is added to a freeway mainline or ramp junction operating at an unacceptable level (LOS E or worse).

3. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
4. Substantially increase hazards due to a design feature;
5. Result in inadequate emergency access; or

6. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

3.10.9 IMPACTS AND MITIGATION MEASURES

This section describes the transportation analysis completed for the Specific Plan and identifies potential impacts and mitigation measures that would be associated with its adoption.

The proposed project includes development of the Specific Plan Area. As a result, it is estimated the existing and proposed circulation network will undergo increased use due to the anticipated increase in population and employment. Like the City's General Plan, the Specific Plan encourages the reduction of vehicle use by encouraging the use of transportation modes such as walking, bike, and public transit.

EXISTING PLUS PROJECT TRAFFIC IMPACT ANALYSIS

The Existing Plus Project scenario reflects the addition of trips associated with buildout of the potential land uses that would be allowed within the Specific Plan Area upon its adoption, as well as creation of the Specific Plan Area circulation network. The Existing Plus Project network scenario also include the following assumptions:

- Widen Boronda Road to 4 lanes from San Juan Grade to Natividad Road
    - Boronda Road & McKinnon Street – 2 lane roundabout
    - Boronda Road & El Dorado Drive – 2 lane roundabout
    - Boronda Road & Natividad Road – 3 lane roundabout
- Widen Russell Road to 4 lanes from San Juan Grade to Natividad Road (new road)
- Widen Natividad Road to 4 lanes from Boronda to Rogge Road
- Widen San Juan Grade Road to 4 lanes from Boronda to Rogge Road
- Add north leg at the intersection of El Dorado Drive and East Boronda Road; El Dorado Drive extends north of East Boronda Road to Rogge Road (new road).

The following is a summary of the intersection, freeway, and nearby ramp junction operation analysis under Existing Plus Project conditions.

Intersections

Under Existing Plus Project conditions, eight of the 30 study intersections are projected to operate unacceptably at LOS E or LOS F during one or both peak hours. A summary of the intersection LOS calculations is contained in Table 3.10-10. Intersections that experience significant impacts in either the morning or evening peak period are shown in bold. Intersection LOS calculations are provided in Appendix I.

TABLE 3.10-10: SUMMARY OF EXISTING PLUS PROJECT PEAK HOUR INTERSECTION LOS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
1	U.S 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road	SSSC	8.1 (16.9)	A (C)	13.1 (20.1)	B (C)
2	U.S 101 Northbound Ramps/Crazy Horse Canyon Road	SSSC	2.9 (12.6)	A (B)	2.6 (14.0)	A (B)
3	U.S 101 Northbound Ramps/U.S 101 Southbound Ramps/Sala Road	AWSC	9.4	A	11.1	B
4	Harrison Road/Sala Road/Driveway	Signal	8.9	A	9.9	A
5	Crazy Horse Canyon Road/San Juan Grade Road	AWSC	10.5	B	13.4	B
6	Hebert Road/San Juan Grade Road	SSSC	5.6 (12.1)	A (B)	7.0 (24.3)	A (C)
7	Old Stage/Hebert Road	SSSC	1.2 (12.3)	A (B)	1.2 (14.4)	A (B)
8	North Main Street/Harrison Road/Russell Road	Signal	17.1	B	22.9	C
9	Van Buren Avenue/Russell Road	Signal	19.5	B	19.5	B
10	San Juan Grade Road/Rogge Road	AWSC	19	C	15.5	C
11	San Juan Grade Road/Russell Road	Signal	29.7	C	25	C
12	Natividad Road/Rogge Road	SSSC	7.2 (14.3)	A (B)	6 (13.8)	A (B)
13	Natividad Road/Russell Road	SSSC	4.2 (9.6)	A (A)	3.9 (9.9)	A (A)
14	**San Juan Grade Road/Van Buren Avenue**	**SSSC**	**80.7 (>150)**	**F (F)**	**129.3 (>150)**	**F (F)**
15	U.S 101 Southbound Ramps/Boronda Road	Signal	6.4	A	7.7	A
16	U.S 101 Northbound Ramps/Boronda Road	Signal	9.7	A	22.1	C
17	North Main Street/Boronda Road	Signal	46.8	D	54.7	D
18	North Main Street/San Juan Grade Road	Signal	14	B	27.1	C

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
19	**San Juan Grade Road/Boronda Road**	Signal	42.0	D	**67**	**E**
20	McKinnon Street/Boronda Road	Roundabout	7.4	A	7.5	A
21	El Dorado Drive/Boronda Road	Roundabout	10.8	A	10.0	A
22	Natividad Road/Boronda Road	Roundabout	8.1	A	9.1	A
23	Independence Boulevard/Boronda Road	Signal	32.1	C	52.4	D
24	**Hemingway Drive/Boronda Road**	**SSSC**	**61.2 (>150)**	**F (F)**	**17.1 (>150)**	**C (F)**
26	North Main Street/East Alvin Drive	Signal	42	D	43.9	D
27	Natividad Road/East Alvin Drive	Signal	16.5	B	12.9	B
28	Independence Boulevard/Constitution Boulevard	Signal	22.5	C	21	C
29	Boronda Road/Constitution Boulevard	Signal	9.1	A	13.5	B
30	U.S 101 Southbound Ramps/West Laurel Drive	Signal	9.5	A	11.7	B
31	U.S 101 Northbound Ramps/West Laurel Drive	Signal	6.6	A	12.6	B
32	**North Main Street/West Laurel Drive**	**Signal**	38.2	D	**72**	**E**
33	**Natividad Road/East Laurel Drive**	**Signal**	**74.6**	**E**	**63.6**	**E**
34	Constitution Boulevard/East Laurel Drive	Signal	17.6	B	23	C
35	**North Sanborn Road/Boronda Road**	**SSSC**	**123.5 (>150)**	**F (F)**	**52.4 (>150)**	**D (F)**
36	Old Stage Road/Williams Road/Private Road	SSSC	5.5 (10.4)	A (B)	4.3 (11.8)	A (B)
37	North Main Street/East Bernal Drive	Signal	46.2	D	41.5	D
38	**Sherwood Drive/Natividad Road/East Bernal Drive/La Posada Way**	**Signal**	**82.8**	**F**	**76.1**	**E**

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
39	East Laurel Drive/North Sanborn Road	Signal	20.3	C	26.6	C
40	Williams Road/Boronda Road	SSSC	8.0 (18.1)	A (C)	8.0 (34.4)	A (D)
41	Freedom Pkwy/Williams Road	Signal	20	C	22.2	C
42	Bardin Road/Bardin Way/Williams Road	Signal	17.7	B	20.5	C
43	East Market Street/Williams Road	Signal	20	C	29.6	C
44	John Street/Williams Road/E Alisal Street	Signal	12.3	B	12.9	B
45	South Sanborn Road/North Sanborn Road/John Street	Signal	45.6	D	25.6	C
46	Bardin Road/East Alisal Street/Driveway	AWSC	10.1	B	10	A
47	Skyway Boulevard/Airport Boulevard	SSSC	2.7 (9.8)	A (A)	11.5 (16.2)	B (C)
48	South Sanborn Road/North Sanborn Road/East Alisal Street	Signal	25.7	C	31.6	C
49	West Laurel Drive/Adams Street	Signal	12.8	B	17.7	B
50	North Davis Road/West Laurel Drive	Signal	26.1	C	44	D
51	East Front Street/Sherwood Drive/Market Street	Signal	14.1	B	19.9	B
52	East Market Street/East Front Street	Signal	9.6	A	11.1	B
53	South Davis Road/Blanco Road	Signal	38.8	D	46.3	D
54	Monterey Street/Monterey Street/East Market Street	Signal	21.6	C	28.5	C
55	**Salinas Street/North Main Street/West Market Street/East Market Street**	**Signal**	**84.2**	**F**	**59.7**	**E**
56	South Main Street/West Blanco Road/East Blanco Road	Signal	38	D	41.9	D

Source: Fehr & Peers, 2018
AWSC = All-Way Stop Control, SSSC = Side Street Stop Control, LOS = Level of Service

Notes:

** Indicates signalized intersection in the future scenario. Assume that unsignalized intersections along Boronda will be signalized with Boronda widening from 2 to 6 lanes.*

Freeway Operation

Table 3.10-11 and Table 3.10-12 show the results of the freeway mainline capacity analysis for U.S. 101 in the Existing Plus Project Condition in the morning and evening peak hour, respectively. All study segments of U.S. 101 analyzed perform within the County CMP standards.

TABLE 3.10-11: AM EXISTING PLUS PROJECT FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Mainline Segment	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
San Juan Road to Crazy Horse Canyon Road	2,149	18.0	C	2,114	17.7	B
Crazy Horse Canyon Road to San Miguel Canyon Road	2,213	18.6	C	2,102	17.6	B
San Miguel Canyon Road to SR 156	3,153	17.6	B	2,626	22.0	C
SR 156 to Sala Road	2,265	19.0	C	2,044	17.1	B
Sala Road to Boronda Road	2,693	15.1	B	1,951	10.9	A
Boronda Road to Laurel Drive	3,004	25.5	C	1,991	16.7	B
Laurel Drive to N. Main Street/SR 183	2,983	25.3	C	1,886	15.8	B
N. Main Street/SR 183 to E. Market Street	2,898	24.5	C	1,851	15.5	B
SR 68 John Street to S. Sanborn Road	1,974	16.6	B	1,548	13.0	B
S. Sanborn Road to Abbott Street	1,708	14.3	B	1,566	13.1	B

[1] *Density Reported in Passenger Cars per Lane Per Hour*
Source: Fehr & Peers, 2018

TABLE 3.10-12: PM EXISTING PLUS PROJECT FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Mainline Segment	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
San Juan Road to Crazy Horse Canyon Road	2,864	24.2	C	2,388	20.0	C
Crazy Horse Canyon Road to San Miguel Canyon Road	2,518	21.1	C	2,408	20.2	C
San Miguel Canyon Road to SR 156	3,301	18.5	C	3,320	28.9	D
SR 156 to Sala Road	2,644	22.2	C	2,656	22.3	C
Sala Road to Boronda Road	2,581	14.4	B	3,244	18.1	C
Boronda Road to Laurel Drive	2,776	23.4	C	3,284	28.5	D
Laurel Drive to N. Main Street/SR 183	2,693	22.6	C	3,460	30.6	D
N. Main Street/SR 183 to E. Market Street	2,678	22.5	C	3,505	31.2	D
SR 68 John Street to S. Sanborn Road	2,079	17.4	B	2,410	20.2	C
S. Sanborn Road to Abbott Street	1,817	15.2	B	2,367	19.9	C

[1] *Density Reported in Passenger Cars per Lane Per Hour*
Source: Fehr & Peers, 2018

Ramp Junctions

Two interchanges on U.S. 101 in Salinas were analyzed by Fehr & Peers to identify the performance of ramp junctions. The results of this analysis for the Existing Plus Project scenario during the morning and evening peak periods are shown in Table 3.10-13 and Table 3.10-14**,** respectively. The U.S. 101 Northbound Off-ramp at East Boronda Road and East Laurel Avenue perform at LOS E in the evening peak period, which is below standards set by the County CMP.

TABLE 3.2-13: AM EXISTING PLUS PROJECT RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
Boronda Road	Loop On-Ramp	26	C	Loop On-Ramp	11.7	B
	On-Ramp	27.1	C	Off-Ramp	22.4	C
West Laurel Drive	Off-Ramp	31.9	D	On-Ramp	19.9	B
	On-Ramp	25.2	C	Loop On-Ramp	16.4	B
				Off-Ramp	16.4	B

Source: Fehr & Peers, 2018

TABLE 3.10-14: PM EXISTING PLUS PROJECT RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
Boronda Road	Loop On-Ramp	23	C	Loop On-Ramp	18.8	B
	On-Ramp	25	C	**Off-Ramp**	**35.1**	**E**
West Laurel Drive	Off-Ramp	29.6	D	On-Ramp	31.4	D
	On-Ramp	21.6	C	Loop On-Ramp	27.8	C
				Off-Ramp	**35.4**	**E**

Source: Fehr & Peers, 2018

Impact 3.10-1: Under Existing Plus Project conditions, implementation of the proposed Specific Plan would conflict with the performance measures established by the City of Salinas, Monterey County, and Caltrans (Less than Significant with Mitigation)

As shown in Table 3.10-11 implementation of the Specific Plan would result in unacceptable operation at eight of the study intersections, and two of the U.S. 101 ramp junctions. All study segments of U.S. 101 performed within the County CMP standards. A This would be a ***potentially significant*** impact.

The reductions in automobile LOS attributable to the WASP include the following intersections:

- San Juan Grade Road/Van Buren Avenue (#14): LOS F during both peak hours
- San Juan Grade Road/East Boronda Road (#19): LOS E during PM peak hour
- Hemingway Drive/East Boronda Road (#24): LOS F during both peak hours
- North Main Street/West Laurel Drive (#32): LOS E during PM peak hour
- Natividad Road/East Laurel Drive (#33): LOS E during both peak hours
- North Sanborn Road/Boronda Road (#35): LOS F during both peak hours
- Sherwood Drive/Natividad Road & East Bernal Drive/La Posada Way (#38): LOS F during AM peak hour and LOS E during PM peak hour
- Salinas Street/North Main Street/West Market Street/East Market Street (#55): LOS F during AM peak hour and LOS E during PM peak hour

In addition, the following ramp junctions would function below County CMP standards during the p.m. peak hour:

- U.S. 101 Northbound Boronda Road Off-Ramp: LOS E (35.1 passenger cars per vehicle per lane)
- U.S. 101 Northbound West Laurel Drive Off-Ramp: LOS E (35.4 passenger cars per vehicle per lane)

Because these potential impacts are attributable to the addition of proposed project-generated traffic to existing volumes, development within the WASP would generally be responsible for funding the required mitigations.

Operation at all eight of these intersections and all two of the aforementioned ramp junctions could be mitigated to acceptable levels of delay under Existing Plus Project conditions. With implementation of the mitigation measures included below, operation at all eight of the affected intersections and both ramp junctions, as identified above, would be improved to acceptable levels:

- **San Juan Grade Road & Van Buren Avenue (#14):** Implement Mitigation Measure 3.10-1 - Install traffic signal. The addition of a traffic signal would improve the intersection's LOS to A for both peak periods, with 4.9 seconds of delay and 4.2 seconds of delay during the AM and PM peak hours, respectively. As this impact is a result of project traffic, the project applicant would be responsible for its funding and implementation at the project approval stage. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **San Juan Grade Road & East Boronda Road (#19):** Implement Mitigation Measure 3.10-2 - Optimize existing signal timing. Optimizing the intersection's signal timing during the PM peak hour would improve its operation to LOS D (50.1 seconds). As this impact is a result of project traffic, the project applicant would be responsible for its funding and implementation at the project approval stage. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **Hemingway Drive & East Boronda Road (#24):** Implement Mitigation Measure 3.10-3 - Signalize intersection. This mitigation would improve LOS in both the morning and evening peak periods to LOS A (7.8 seconds per vehicle) and LOS B (11.2 seconds per vehicle), respectively. As this impact is a result of project traffic, the project applicant would be responsible for its funding and implementation at the project approval stage. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **North Main Street & West Laurel Drive (#32):** Implement Mitigation Measure 3.10-4 **-** Optimize existing signal timings. This mitigation was found to improve level of service to LOS D, with 49.1 seconds of delay during the evening peak hour. As this impact is a result of project traffic, the project applicant would be responsible for its funding and implementation at the project approval stage. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **Natividad Road & East Laurel Drive (#33):** Implement Mitigation Measure 3.10-5 **-** The proposed mitigation is to widen the intersection to add additional northbound and southbound through lanes. This mitigation was found to improve the level of service to D, with 48.2 seconds of delay and 51.2 seconds of delay in the morning and evening peak periods, respectively. As this impact is a result of project traffic, the project applicant shall be responsible for its funding and implementation at the project approval stage. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **North Sanborn Road/Boronda Road (#35): Implement** Mitigation Measure 3.10-5 - Install a traffic signal. This mitigation was found to improve level of service to C in the morning peak hour and LOS B during the evening peak hour, with 22.8 seconds of delay and 15.1 seconds of delay, respectively. As this impact is a result of project traffic, the project applicant shall be responsible for its funding and implementation at the project approval stage. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **Sherwood Drive/Natividad Road & East Bernal Drive/La Posada Way (#38):** Mitigation Measure 3.10-6: Optimize existing signal timings and add an eastbound left turn pocket. The proposed mitigation is to add an eastbound left turn pocket and optimize the existing signal timing to better accommodate the expected changes in traffic distribution and volume in the with-project scenario. The proposed mitigation was found to improve LOS in the morning and evening peak periods to LOS B, with 18.0 seconds of delay and 18.3 seconds of delay, respectively. As this impact is a result of project traffic, the project applicant shall be responsible for its funding and implementation at the project approval stage. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **Salinas Street/North Main Street/West Market Street/East Market Street (#55):** Mitigation Measure 3.10-7: Add a southbound left turn lane and optimize the traffic signal's timing. The implementation of this mitigation measure would improve the intersection's operation to LOS D in both the morning and evening peak hours, with 45.5 and 35.9 seconds of delay per vehicle, respectively. As this impact is a result of project traffic, the project applicant shall be responsible for its funding and implementation at the project approval stage. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **Impact E.9: U.S 101 Ramp Junctions: Mitigation Measures 3.10-8 and 3.10-9:** Contribution to the TAMC RDIF Program and payment of the City of Salina's Traffic Impact Fees. The proposed mitigation for this impact is the project's required contribution to the TAMC Regional Development Impact Fee (RDIF) Program and the City of Salina's Traffic Impact Fee (TIF) Program. These programs include improvements to U.S 101 that would improve mainline and ramp junction operations, which would mitigate this project impact.

Therefore, with implementation of these mitigation measures, the impacts to the above eight intersections and two ramp junctions are considered ***less than significant***, and no further mitigation is required.

MITIGATION MEASURES

Mitigation Measure 3.10-1*: The project applicant shall provide the funding for the installation of a traffic signal at San Juan Grade Road/Van Buren Avenue, prior to approval of final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-2*: The project applicant shall provide the funding for the optimization of the existing signal timing at San Juan Grade Road/East Boronda Road, prior to approval of final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-3*: The project applicant shall provide the funding for the signalization of the intersection at Hemingway Drive/East Boronda Road, prior to approval of final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-4*: The project applicant shall provide the funding for the optimization of existing signal timings at North Main Street/Laurel Drive, prior to approval of final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-5*: The project applicant shall provide the funding for the widening of the intersection at Natividad Road/East Laurel Drive to add additional northbound and southbound through lanes, prior to final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-6*: The project applicant shall provide the funding for the installation of a traffic signal at the intersection of North Sanborn Road/Boronda Road, prior to final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-7*: The project applicant shall provide the funding for the optimization of existing signal timings and to add an eastbound left turn pocket at the intersection of Sherwood Drive/Natividad Road & East Bernal Drive/La Posada Way, prior to final improvement plans. This mitigation includes the addition of an eastbound left turn pocket and optimization of the existing signal timing to better accommodate the expected changes in traffic distribution and volume with implementation of the proposed project. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-8*: The project applicant shall provide the funding for the addition a southbound left turn lane and optimization of the traffic signal's timing at the intersection of Salinas Street/North Main Street/West Market Street/East Market Street, prior to final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-9*: The project applicant shall contribute to the Transportation Agency for Monterey County (TAMC) Regional Development Impact Fee (RDIF) Program and the City of Salinas' Traffic Impact Fee (TIF) Program, as determined by the TAMC and the City of Salinas, respectively. These programs include improvements to U.S. 101 that would improve mainline and ramp junction operations, which would mitigate the proposed project's impact to the U.S. 101 ramp junctions affected by the proposed project (i.e. the Northbound Road Off-Ramp and Northbound West Laurel Drive Off-Ramp).*

EXISTING PLUS PROJECT AND CENTRAL AREA SPECIFIC PLAN TRAFFIC IMPACT ANALYSIS

The Existing Plus Project and CASP Conditions Scenario incorporates the combined effect of the WASP and the CASP on the local transportation network.

Intersections

The expected trip generation for WASP and CASP were overlaid on the existing conditions on the local transportation network. The magnitude of this effect on study intersections is documented by Table 3.10-15 below.

TABLE 3.10-15: EXISTING PLUS PROJECT AND CASP INTERSECTION LEVEL OF SERVICE ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
1	U.S 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road	SSSC	8.8 (17.8)	A (C)	14.3 (21.7)	B (C)
2	U.S 101 Northbound Ramps/Crazy Horse Canyon Road	SSSC	2.8 (12.9)	A (B)	2.6 (14.4)	A (B)
3	U.S 101 Northbound Ramps/U.S 101 Southbound Ramps/Sala Road	AWSC	11.3	B	12.9	B
4	Harrison Road/Sala Road/Driveway	Signal	9.5	A	10.7	B
5	Crazy Horse Canyon Road/San Juan Grade Road	AWSC	11	B	14.6	B
6	Hebert Road/San Juan Grade Road	SSSC	5.9 (12.5)	A (B)	7.4 (26.8)	A (D)
7	Old Stage Road/Hebert Road	SSSC	1.1 (12.9)	A (B)	1.2 (15.1)	A (C)
8	North Main Street/Harrison Road/Russell Road	Signal	17.5	B	24.9	C
9	Van Buren Avenue/Russell Road	Signal	36.7	D	15.4	B
10	San Juan Grade Road/Rogge Road	AWSC	19	C	15.5	C
11	San Juan Grade Road/Russell Road	Signal	44.1	D	35.4	D
12	Natividad Road/Rogge Road	SSSC	8.2 (18.0)	A (C)	6.0 (14.0)	A (B)
13	Natividad Road/Russell Road	SSSC	10.6 (16.3)	B (C)	12.2 (24.4)	B (C)
14	**San Juan Grade Road/Van Buren Avenue**	**SSSC**	**80.7 (>150)**	**F (F)**	**129.3 (>150)**	**F (F)**
15	U.S 101 Southbound Ramps/Boronda Road	Signal	6.6	A	8	A
16	U.S 101 Northbound Ramps/Boronda Road	Signal	10.9	B	26	C
17	**North Main Street/Boronda Road**	Signal	46.2	D	**62.9**	**E**
18	North Main Street/San Juan Grade Road	Signal	14.8	B	28.3	C
19	**San Juan Grade Road/Boronda Road**	**Signal**	44.4	D	**88.1**	**F**

TABLE 3.10-15: EXISTING PLUS PROJECT AND CASP INTERSECTION LEVEL OF SERVICE ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
20	McKinnon Street/Boronda Road	Roundabout	9.8	A	9.5	A
21	El Dorado Drive/Boronda Road	Roundabout	21.8	C	15.4	C
22	Natividad Road/Boronda Road	Roundabout	20.2	C	22.6	C
23	Independence Boulevard/Boronda Road	Roundabout	8.4	A	9.8	A
24	Hemingway Drive/Boronda Road	Signal	37.8	D	29.4	C
25	Old Stage Road/Constitution Boulevard	AWSC	7.8	A	7.8	A
26	North Main Street/East Alvin Drive	Signal	42	D	43.9	D
27	Natividad Road/East Alvin Drive	Signal	23.5	C	19.2	B
28	Independence Boulevard/Constitution Boulevard	Signal	36.9	D	28.5	C
29	Boronda Road/Constitution Boulevard	Signal	36.2	D	39.4	D
30	U.S 101 Southbound Ramps/West Laurel Drive	Signal	9.6	A	12	B
31	U.S 101 Northbound Ramps/West Laurel Drive	Signal	6.7	A	12.9	B
32	**North Main Street/West Laurel Drive**	**Signal**	39.8	D	**72.1**	**E**
33	**Natividad Road/East Laurel Drive**	**Signal**	**106.7**	**F**	**90.1**	**F**
34	Constitution Boulevard/East Laurel Drive	Signal	21.2	C	28.6	C
35	**North Sanborn Road/Boronda Road**	**SSSC**	**>150 (>150)**	**F (F)**	**>150 (>150)**	**F (F)**
36	Old Stage Road/Williams Road/Private Road	SSSC	6.4 (13.7)	A (B)	7.7 (19.4)	A (C)
37	North Main Street/East Bernal Drive	Signal	46.7	D	41.7	D
38	**Sherwood Drive/Natividad Road/East Bernal Drive/La Posada Way**	**Signal**	**116**	**F**	**93**	**F**
39	East Laurel Drive/North Sanborn Road	Signal	26.7	C	32.7	C

TABLE 3.10-15: EXISTING PLUS PROJECT AND CASP INTERSECTION LEVEL OF SERVICE ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
40	**Williams Road/Boronda Road**	**SSSC**	**15.8 (64.2)**	**B (F)**	**21.0 (>150)**	**C (F)**
41	Freedom Pkwy/Williams Road	Signal	26.4	C	34.9	C
42	Bardin Road/Bardin Way/Williams Road	Signal	22.6	C	26.6	C
43	East Market Street/Williams Road	Signal	20.7	C	31.6	C
44	John Street/Williams Road/E Alisal Street	Signal	13	B	14.8	B
45	**South Sanborn Road/North Sanborn Road/John Street**	**Signal**	**73.5**	**E**	**45**	**D**
46	Bardin Road/East Alisal Street/Driveway	AWSC	11	B	10.6	B
47	Skyway Boulevard/Airport Boulevard	SSSC	2.8 (10.0)	A (B)	12.3 (17.6)	B (C)
48	South Sanborn Road/North Sanborn Road/East Alisal Street	Signal	33.8	C	39.6	D
49	West Laurel Drive/Adams Street	Signal	13.3	B	18.2	B
50	North Davis Road/West Laurel Drive	Signal	26.2	C	44	D
51	East Front Street/Sherwood Drive/Market Street	Signal	16.6	B	32.7	C
52	East Market Street/East Front Street	Signal	10	B	12.5	B
53	South Davis Road/Blanco Road	Signal	39.1	D	46.9	D
54	Monterey Street/Monterey Street/East Market Street	Signal	22.6	C	29.3	C
55	**Salinas Street/North Main Street/West Market Street/East Market Street**	**Signal**	**95**	**F**	**62.7**	**E**
56	South Main Street/West Blanco Road/East Blanco Road	Signal	40.1	D	43.3	D

Source: Fehr & Peers, 2018
AWSC = All-Way Stop Control, SSSC = Side Street Stop Control, LOS = Level of Service
Notes:

- *Side-street stop-controlled (SSSC) intersection LOS is reported as: overall intersection delay and LOS (worst-case stop-controlled movement or approach delay and LOS).*

All-way stop controlled (AWSC) LOS is reported for the overall intersection, based on average delay per vehicle

Nine intersections were found to operate below local minimum service standards in either the morning or evening peak period. More intersections fail in the Existing plus Project and CASP Scenario due to the increased volumes of trips associated with the CASP.

Freeway Operation

Table 3.10-16 and Table 3.10-17 document the findings of a capacity analysis focused on the U.S 101 study segments through Salinas in the Existing Plus Project and CASP Conditions scenario for the morning and evening peak periods, respectively.

TABLE 3.10-16: AM EXISTING PLUS PROJECT AND CASP FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Segment	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
San Juan Road to Crazy Horse Canyon Road	2,319	19.4	C	2,334	19.6	C
Crazy Horse Canyon Road to San Miguel Canyon Road	2,383	20.0	C	2,322	19.5	C
San Miguel Canyon Road to SR 156	3,323	18.6	C	2,864	24.0	C
SR 156 to Sala Road	2,435	20.4	C	2,264	19.0	C
Sala Road to Boronda Road	2,713	15.2	B	2,101	11.8	B
Boronda Road to Laurel Drive	3,024	25.7	C	2,141	18.0	B
Laurel Drive to N. Main Street/SR 183	3,123	26.7	D	2,036	17.1	B
N. Main Street/SR 183 to E. Market Street	2,938	24.9	C	1,881	15.8	B
SR 68 John Street to S. Sanborn Road	2,014	16.9	B	1,578	13.2	B
S. Sanborn Road to Abbott Street	1,748	14.7	B	1,596	13.4	B

[1] *Density Reported in Passenger Cars per Mile per Lane*
Source: Fehr & Peers, 2018

TABLE 3.10-17: PM EXISTING PLUS PROJECT AND CASP FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Segment	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
San Juan Road to Crazy Horse Canyon Road	3,094	26.4	D	2,558	21.6	C
Crazy Horse Canyon Road to San Miguel Canyon Road	2,748	23.1	C	2,578	21.6	C
San Miguel Canyon Road to SR 156	3,531	19.7	C	3,490	31.0	D
SR 156 to Sala Road	2,874	24.3	C	2,826	23.8	C
Sala Road to Boronda Road	2,602	14.6	B	3,404	19.0	C
Boronda Road to Laurel Drive	2,796	23.5	C	3,444	30.4	D
Laurel Drive to N. Main Street/SR 183	2,823	23.8	C	3,620	32.7	D
N. Main Street/SR 183 to E. Market Street	2,708	22.7	C	3,545	31.7	D
SR 68 John Street to S. Sanborn Road	2,109	17.7	B	2,450	20.6	C
S. Sanborn Road to Abbott Street	1,847	15.5	B	2,407	20.2	C

[1] *Density Reported in Passenger Cars per Mile per Lane*
Source: Fehr & Peers, 2018

All study segments perform within the minimum standards set by the County CMP.

Ramp Junctions

Table 3.10-18 and Table 3.10-19 document the findings of a capacity analysis for U.S 101 ramp junctions at two interchanges in Salinas under the Existing Plus Project and CASP scenario, during the morning and evening peak periods, respectively.

TABLE 3.10-18: AM EXISTING PLUS PROJECT AND CASP RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
	Loop On-Ramp	26.1	C	Loop On-Ramp	13	B

TABLE 3.10-18: AM EXISTING PLUS PROJECT AND CASP RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
Boronda Road	On-Ramp	27.3	C	Off-Ramp	23.9	C
West Laurel Drive	Off-Ramp	32.1	D	On-Ramp	21.6	C
	On-Ramp	25.3	C	Loop On-Ramp	17.7	B
				Off-Ramp	17.4	B

Source: Fehr & Peers, 2018

TABLE 3.10-19: PM EXISTING PLUS PROJECT AND CASP RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
Boronda Road	Loop On-Ramp	23.2	C	Loop On-Ramp	20.1	C
	On-Ramp	25.2	C	**Off-Ramp**	**36.6**	**E**
West Laurel Drive	Off-Ramp	29.8	D	On-Ramp	33.1	D
	On-Ramp	21.8	C	Loop On-Ramp	29.2	D
				Off-Ramp	**37.0**	**E**

Source: Fehr & Peers, 2018

The Northbound Off-Ramps at East Boronda Road and East Laurel Street perform at LOS E, which is below the minimum standards set by the County CMP.

Impact 3.10-2: Under Existing Plus Project and Central Area Specific Plan conditions, implementation of the proposed Specific Plan may conflict with the performance measures established by the City of Salinas, Monterey County, and Caltrans (Less than Significant with Mitigation)

As shown in Table 3.10-15, implementation of the Specific Plan would result in unacceptable operation at ten of the study intersections, and two of the U.S. 101 ramp junctions, under the Existing Plus Project and CASP scenario. All study segments of U.S. 101 performed within the County CMP standards. A This would be a ***potentially significant*** impact.

The reductions in automobile LOS attributable to the WASP plus CASP scenario include the following intersections:

- San Juan Grade Road/Van Buren Avenue (#14): LOS F during both peak hours
- North Main Street/Boronda Road (#17): LOS F during PM peak hour
- San Juan Grade Road/East Boronda Road (#19): LOS F during PM peak hour
- North Main Street/West Laurel Drive (#32): LOS E during PM peak hour
- Natividad Road/East Laurel Drive (#33): LOS F during both peak hours
- North Sanborn Road/Boronda Road (#35): LOS F during both peak hours
- Sherwood Drive/Natividad Road & East Bernal Drive/La Posada Way (#38): LOS F during both peak hours
- Williams Road/Boronda Road (#40): LOS F during both peak hours
- South Sanborn Road/North Sanborn Road/John Street (#45): LOS E during AM peak hour
- Salinas Street/North Main Street/West Market Street/East Market Street (#55): LOS F during both peak hours

In addition, the following ramp junctions would function below County CMP standards during the p.m. peak hour:

- U.S. 101 Northbound Boronda Road Off-Ramp: LOS E (36.6 passenger cars per vehicle per lane)
- U.S. 101 Northbound West Laurel Drive Off-Ramp: LOS E (37.0 passenger cars per vehicle per lane)

Operation at all nine of these intersections and all two of the aforementioned ramp junctions could be mitigated to acceptable levels of delay under Existing Plus Project and CASP conditions. With implementation of the mitigation measures included below, operation at all eight of the affected intersections and both ramp junctions, as identified above, would be improved to acceptable levels:

- **San Juan Grade Road & Van Buren Avenue (#14):** Implement the previously identified Mitigation Measure 3.10-1 - Install traffic signal. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **North Main Street & East Boronda Road (#17):** Mitigation Measure 3.10-10 – Optimize signal timing. The optimization of the existing traffic signal timing and splits at this coordinated intersection would mitigate the identified impact. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **San Juan Grade Road & East Boronda Road (#19):** Implement the previously identified Mitigation Measure 3.10-2 - Optimize existing signal timing and splits. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **North Main Street & West Laurel Drive (#32):** Implement the previously identified Mitigation Measure 3.10-4 **-** Optimize existing signal timing. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **Natividad Road & East Laurel Drive (#33):** Mitigation Measure 3.10-11 **-** The proposed mitigation is to as convert the eastbound right turn lane to a shared through-right turn lane. With the implementation of the identified mitigation measure, as well as implementation of the previously identified Mitigation Measure 3.10-5 (which requires the widening of the intersection and the addition of northbound and southbound through lanes), the impact would be less than significant.

- **North Sanborn Road/Boronda Road (#35):** Mitigation Measure 3.10-12 – Add an eastbound right turn pocket. With the implementation of this mitigation measure, and with implementation of the previously identified Mitigation Measure 3.10-6 (which requires the installation of a traffic signal), the impact would be less than significant.

- **Sherwood Drive/Natividad Road & East Bernal Drive/La Posada Way (#38):** Implement the previously identified Mitigation Measure 3.10-7: Optimize existing signal timings and add an eastbound left turn pocket. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **Williams Road/East Boronda Road (#40):** Mitigation Measure 3.10-13: Install traffic signal. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **South Sanborn Road/North Sanborn Road/John Street (#45)**: Mitigation Measure 3.10-14. Optimize signal timing. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **Salinas Street/North Main Street/West Market Street/East Market Street (#55)**: Implement the previously identified Mitigation Measure 3.10-8: Add a southbound left turn lane and optimize the traffic signal's timing. With implementation of this mitigation measures, the impact would be less than significant.

- **U.S. 101 Ramp Junctions:** Implement the previously identified Mitigation Measure 3.10-9. Contribution to the TAMC RDIF Program and payment of the City of Salina's Traffic Impact Fees. The proposed mitigation for this impact is the project's required contribution to the TAMC Regional Development Impact Fee (RDIF) Program and the City of Salina's Traffic Impact Fee (TIF) Program. These programs include improvements to U.S. 101 that would improve mainline and ramp junction operations, which would mitigate this project impact.

Therefore, with implementation of Mitigation Measures 3.10-1, 3.10-2, 3.10-4, 3.10-6, 3.10-7, 3.10-8, and 3.10-9, and the following mitigation measures, the impacts to the above ten intersections and two ramp junctions are considered ***less than significant***, and no further mitigation is required.

MITIGATION MEASURES

Mitigation Measure 3.10-10*: The project applicant shall provide funding to optimize the existing traffic signal timing and splits at intersection of North Main Street/East Boronda Road, prior to final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-11*: The project applicant shall provide funding to convert the eastbound right turn lane to a shared through-right turn lane at Natividad Road/East Laurel Drive, prior to final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-12*: The project applicant shall provide funding for addition of an eastbound right turn pocket at the intersection of North Sanborn Road/Boronda Road, prior to final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-13*: The project applicant shall provide funding for the installation of a traffic signal at the intersection of Williams Road/East Boronda Road, prior to final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-14*: The project applicant shall provide funding to optimize the existing traffic signal timing and splits at the South Sanborn/North Sanborn/John Street intersection, prior to final improvement plans. The final improvement plans shall note this improvement.*

CUMULATIVE PLUS PROJECT TRAFFIC IMPACT ANALYSIS

The Cumulative Conditions Plus Project scenario models the overall change in traffic volumes in Salinas as a result of forecast development, with the addition of the proposed project. The intent is to understand how the proposed project will influence travel behavior in light of future conditions, and to identify possible significant future impacts.

Intersections

The results of the intersection analysis for this scenario are shown in Table 3.10-20 below.

TABLE 3.10-20: CUMULATIVE PLUS PROJECT INTERSECTION OPERATION ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
1	**U.S 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road**	**SSSC**	8.3 (18.8)	A (C)	**150 (>150)**	**F (F)**
2	**U.S 101 Northbound Ramps/Crazy Horse Canyon Road**	**SSSC**	2.4 (13.1)	A (B)	**5.1 (51.5)**	**A (F)**
3	U.S 101 Northbound Ramps/U.S 101 Southbound Ramps/Sala Road	AWSC	10.2	B	13.5	B
4	Harrison Road/Sala Road	Signal	11	B	12.4	B
5	**Crazy Horse Canyon Road/San Juan Grade Road**	**AWSC**	11.3	B	**147.3**	**F**
6	**Hebert Road/San Juan Grade Road**	**SSSC**	6.6 (14.2)	A (B)	**10.0 (40.3)**	**A (E)**
7	Old Stage Road/Hebert Road	SSSC	5.8 (14.6)	A (B)	9.1 (32.9)	A (D)
8	North Main Street/Harrison Road/Russell Road	Signal	17.4	B	29.4	C
9	Van Buren Avenue/Russell Road	Signal	21.9	C	17.2	B
10	San Juan Grade Road/Rogge Road	AWSC	23.1	C	17.3	C
11	San Juan Grade Road/Russell Road	Signal	33.2	C	42.2	D
12	**Natividad Road/Rogge Road**	**SSSC**	7.1 (13.4)	A (B)	**37.3 (125)**	**E (F)**
13	**Natividad Road/Russell Road**	**SSSC**	**11.2 (67.1)**	**B (F)**	**24.6 (>150)**	**C (F)**
14	**San Juan Grade Road/Van Buren Avenue**	**SSSC**	**100.8 (>150)**	**F (F)**	**>150 (>150)**	**F (F)**
15	U.S 101 Southbound Ramps/Boronda Road	Signal	7	A	8.9	A
16	U.S 101 Northbound Ramps/Boronda Road	Signal	9.8	A	27.4	C
17	**North Main Street/Boronda Road**	**Signal**	50.3	D	**99.5**	**F**

TABLE 3.10-20: CUMULATIVE PLUS PROJECT INTERSECTION OPERATION ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
18	North Main Street/San Juan Grade Road	Signal	15.5	B	42.9	D
19	San Juan Grade Road/Boronda Road	Signal	41	D	45.7	D
20	McKinnon Street/Boronda Road	Roundabout	10.6	B	9.0	A
21	El Dorado Drive/Boronda Road	Roundabout	10.8	B	12.5	B
22	Natividad Road/Boronda Road	Roundabout	9.5	A	17.8	C
23	Independence Boulevard/Boronda Road	Roundabout	5.4	A	5.9	A
24	Hemingway Drive/Boronda Road	Signal	47.0	D	4.5	A
25	Old Stage Road/Constitution Boulevard	AWSC	9.1	A	10	A
26	N Main Street/East Alvin Drive	Signal	43.3	D	44.7	D
27	Natividad Road/East Alvin Drive	Signal	23.3	C	15.4	B
28	Independence Boulevard/Constitution Boulevard	Signal	30.8	C	29.9	C
29	Boronda Road/Constitution Boulevard	Signal	8.5	A	9.8	A
30	U.S 101 Southbound Ramps/West Laurel Drive	Signal	14.4	B	17.5	B
31	U.S 101 Northbound Ramps/West Laurel Drive	Signal	9.1	A	16.5	B
32	**N Main Street/West Laurel Drive**	**Signal**	41.8	D	**158.6**	**F**
33	**Natividad Road/East Laurel Drive**	**Signal**	**86.9**	**F**	**95.9**	**F**
34	**Constitution Boulevard/East Laurel Drive**	**Signal**	55	D	**69.7**	**E**
35	North Sanborn Road/Boronda Road	Signal	16.3	B	45.6	D

TABLE 3.10-20: CUMULATIVE PLUS PROJECT INTERSECTION OPERATION ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
36	**Old Stage Road/Williams Road/Private Road**	**SSSC**	**>150 (>150)**	**F (F)**	**>150 (>150)**	**F (F)**
37	**North Main Street/East Bernal Drive**	**Signal**	**60**	**E**	**75.2**	**E**
38	**Sherwood Drive/Natividad Road/East Bernal Drive/La Posada Way**	**Signal**	**91.9**	**F**	**133.9**	**F**
39	East Laurel Drive/North Sanborn Road	Signal	24.2	C	29.4	C
40	Williams Road/East Boronda Road	Signal	20.3	C	47.3	D
41	Freedom Parkway/Williams Road	Signal	21.6	C	31.5	C
42	Bardin Road/Bardin Way/Williams Road	Signal	21.6	C	26.6	C
43	East Market Street/Williams Road	Signal	22.9	C	49.1	D
44	John Street/Williams Road/East Alisal Street	Signal	13.7	B	21.2	C
45	South Sanborn Road/North Sanborn Road/John Street	Signal	31.6	C	34.1	C
46	Bardin Road/East Alisal Street/Driveway	AWSC	9.6	A	14.2	B
47	Skyway Boulevard/Airport Boulevard	SSSC	7.5 (10.0)	A (B)	18.9 (21.4)	C (C)
48	South Sanborn Road/North Sanborn Road/East Alisal Street	Signal	27.5	C	37.8	D
49	West Laurel Drive/Adams Street	Signal	19.4	B	22.1	C
50	North Davis Road/West Laurel Drive	Signal	36.3	D	54.2	D
51	East Front Street/Sherwood Drive/Market Street	Signal	25	C	49.6	D
52	East Market Street/East Front Street	Signal	10.4	B	14.2	B

TABLE 3.10-20: CUMULATIVE PLUS PROJECT INTERSECTION OPERATION ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
53	**South Davis Road/Blanco Road**	**Signal**	**187.2**	**F**	**145.7**	**F**
54	Monterey Street/Monterey Street/East Market Street	Signal	23	C	30.6	C
55	**Salinas Street/North Main Street/West Market Street/East Market Street**	**Signal**	**84.8**	**F**	**95.1**	**F**
56	**South Main Street/West Blanco Road/East Blanco Road**	**Signal**	**50.3**	**D**	**69.8**	**E**

Source: Fehr & Peers, 2018
AWSC = All-Way Stop Control, SSSC = Side Street Stop Control, LOS = Level of Service
Notes:

- *Side-street stop-controlled (SSSC) intersection LOS is reported as: overall intersection delay and LOS (worst-case stop-controlled movement or approach delay and LOS).*
- *All-way stop controlled (AWSC) LOS is reported for the overall intersection, based on average delay per vehicle*

Overall, seventeen intersections were found to operate below the local minimum LOS threshold in the morning and/or evening peak period. Intersections that operate below the local threshold as a result of project-related traffic are considered project contributions to significant cumulative impacts.

Freeway Operation

The Travel Demand Model was also used to forecast vehicle volumes on the ten study segments of U.S. 101. Table 3.10-21 shows the morning peak period results, and Table 3.10-22 shows the evening results. LOS scores are compared to the minimum operating standards defined by the County CMP in the tables below.

TABLE 3.10-21: AM CUMULATIVE PLUS PROJECT FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Segment	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
San Juan Road to Crazy Horse Canyon Road	3,260	28.2	D	3,750	34.6	D
Crazy Horse Canyon Road to San Miguel Canyon Road	2,830	23.8	C	3,140	26.9	D
San Miguel Canyon Road to SR 156	**3,780**	**35.0**	**E**	**4,100**	**40.6**	**E**

TABLE 3.10-21: AM CUMULATIVE PLUS PROJECT FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Segment	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
SR 156 to Sala Road	3,430	30.2	D	3,210	27.7	D
Sala Road to Boronda Road	3,400	19.0	C	3,080	17.2	C
Boronda Road to Laurel Drive	3,880	21.7	C	3,340	18.7	C
Laurel Drive to N. Main Street/SR 183	3,890	21.8	C	3,120	17.4	B
N. Main Street/SR 183 to E. Market Street	3,260	18.2	C	2,500	14.0	B
SR 68 John Street to S. Sanborn Road	2,340	13.1	B	2,050	11.5	B
S. Sanborn Road to Abbott Street	2,580	14.4	B	1,760	9.8	A

[1] *Density Reported in Passenger Cars per Mile per Lane*
Source: Fehr & Peers, 2018

TABLE 3.10-22: PM CUMULATIVE PLUS PROJECT FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Segment	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
San Juan Road to Crazy Horse Canyon Road	**4,410**	**47.4**	**F**	3,670	33.4	D
Crazy Horse Canyon Road to San Miguel Canyon Road	3,550	31.8	D	3,310	28.6	D
San Miguel Canyon Road to SR 156	**5,010**	**68.6**	**F**	**4,430**	**47.9**	**F**
SR 156 to Sala Road	**4,530**	**50.7**	**F**	3,480	30.8	D
Sala Road to Boronda Road	4,350	24.5	C	3,380	18.9	B
Boronda Road to Laurel Drive	4,510	25.5	C	3,910	21.9	C
Laurel Drive to N. Main Street/SR 183	4,290	24.1	C	4,030	22.6	C
N. Main Street/SR 183 to E. Market Street	3,700	20.7	C	3,940	22.0	C
SR 68 John Street to S. Sanborn Road	3,010	16.8	B	2,690	15.0	B

TABLE 3.10-22: PM CUMULATIVE PLUS PROJECT FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Segment	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
S. Sanborn Road to Abbott Street	2,350	13.1	B	3,220	18.0	B

[1] *Density Reported in Passenger Cars per Mile per Lane*
Source: Fehr & Peers, 2018

Similar to the Cumulative Conditions results, San Juan Road to Crazy Horse Canyon Road, San Miguel Canyon Road to SR 156, and SR 156 to Sala Road all fall below the minimum LOS standards in the evening periods. In the morning period San Miguel Canyon Road to SR 156 falls below the LOS standard.

Ramp Junctions

Capacity analyses for ramp junctions were analyzed at two interchanges along U.S. 101 in Salinas. The results of this analysis for Cumulative Plus Project scenario during the morning and evening peak period are shown in Table 3.10-23 and Table 3.10-24, respectively.

TABLE 3.10-23: AM CUMULATIVE PLUS PROJECT RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
Boronda Broad	Loop On-Ramp	23.7	C	Loop On-Ramp	14.1	B
	On-Ramp	21.5	C	Off-Ramp	26.3	C
West Laurel Drive	Off-Ramp	28.3	D	On-Ramp	20.7	C
	On-Ramp	21.8	C	Loop On-Ramp	18.2	B
				Off-Ramp	24.1	C

Source: Fehr & Peers, 2018

TABLE 3.10-24: PM CUMULATIVE PLUS PROJECT RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
Boronda Road	Loop On-Ramp	26.0	C	Loop On-Ramp	14.4	B
	On-Ramp	25.2	C	Off-Ramp	31.2	D
West Laurel Drive	Off-Ramp	31.8	D	On-Ramp	23.6	C
	On-Ramp	24.1	C	Loop On-Ramp	22.0	C
				Off-Ramp	30.9	D

Source: Fehr & Peers, 2018

All ramp junctions perform at or above the minimum standards set by County CMP.

Impact 3.10-3: Under Cumulative Plus Project conditions, implementation of the proposed Specific Plan may conflict with the performance measures established by the City of Salinas, Monterey County, and Caltrans (Cumulatively Considerable and Significant and Unavoidable)

As shown in Table 3.10-20, implementation of the Specific Plan would result in unacceptable operation at seventeen of the study intersections, and four of the freeway segments, under the cumulative Plus Project scenario. A This would be a ***potentially significant*** impact.

The reductions in automobile LOS attributable to the WASP under the cumulative scenario include the following intersections:

- U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road (#1): LOS F during the PM peak hour
- U.S. 101 Northbound Ramps/Crazy Horse Canyon Road (#2): LOS F during the PM peak hour
- Crazy Horse Canyon Road/San Juan Grade Road (#5): LOS F during the PM peak hour
- Hebert Road/San Juan Grade Road (#6): LOS E during the PM peak hour
- Natividad Road/Rogge Road (#12): LOS F during the PM peak hour
- Natividad Road/Russell Road (#13): LOS during both peak hours
- San Juan Grade Road/Van Buren Avenue (#14): LOS F during both peak hours
- North Main Street/Boronda Road (#17): LOS F during the PM peak hour
- North Main Street/West Laurel Drive (#32): LOS F during the PM peak hour
- Natividad Road/East Laurel Drive (#33): LOS F during both peak hours
- Constitution Boulevard/East Laurel Drive (#34): LOS E during the PM peak hour
- Old Stage Road/Williams Road/Private Road (#36): LOS F during both peak hours

- North Main Street/East Bernal Drive (#37): LOS E during both peak hours
- Sherwood Drive/Natividad Road/East Bernal Drive/La Posada Way (#38): LOS F during both peak hours
- South Davis Road/Blanco Road (#53): LOS F during both peak hours
- Salinas Street/North Main Street/West Market Street/East Market Street (#55): LOS F during both peak hours

In addition, reductions in automobile LOS attributable to the WASP under the cumulative scenario would occur at the following freeway segments:

- San Juan Road to Crazy Horse Canyon Road (southbound): LOS F during the PM peak hour
- San Miguel Canyon Road to SR 156:
    - Northbound: LOS E during both peak hours
    - Southbound: LOS F during both peak hours
- SR 156 to Sala Road (southbound): LOS F during the PM peak hour

All ramp junctions perform at or above the minimum standards set by the County CMP under this scenario.

With implementation of the mitigation measures included below, operation at all seventeen of the affected intersections and each of the freeway segments would be improved:

- **U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road (#1)**: Mitigation Measure 3.10-15: install a traffic signal at this intersection. However, while the project could make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **U.S. 101 Northbound Ramps/Crazy Horse Canyon Road (#2)**: Mitigation Measure 3.10-16: Install traffic signal. However, while the project could make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **Crazy Horse Canyon Road/San Juan Grade Road (#5)**: Mitigation Measure 3.10-30: Install traffic signal. However, while the project could make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **Hebert Road/San Juan Grade Road (#6):** No feasible mitigation is available. Furthermore, there is no mechanism to ensure the full funding and completion of an improvement, should

one become available. Thus, this cumulative impact is considered significant and unavoidable.

- **Natividad Road/Rogge Road (#12)**: Mitigation Measure 3.10-18: Install traffic signal. However, while the project could make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **Natividad Road/Russell Road (#13)**: Mitigation Measure 3.10-19: Install traffic signal. However, while the project could make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **San Juan Grade Road/Van Buren Avenue (#14)**: Implement previously identified Mitigation Measure 3.10-1. With implementation of this mitigation measure, the impact would be less than significant.

- **North Main Street/East Boronda Road (#17)**: Mitigation Measure 3.10-20: Install southbound and westbound left turn lanes. The project should make a fair-share contribution to mitigate its contribution to this significant cumulative adverse impact. As the City has been collecting funds from other development projects to improve this intersection, this contribution would mitigate the Project's contribution to the significant adverse cumulative impact at this location.

- **North Main Street/West Laurel Drive (#32)**: No feasible mitigation is available. Furthermore, there is no mechanism to ensure the full funding and completion of an improvement, should one become available. Thus, this cumulative impact is considered significant and unavoidable.

- **Natividad Road/East Laurel Drive (#33)**: Implement previously identified Mitigation Measure 3.10-5: Install northbound and southbound through lanes. However, while the project could make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **Constitution Boulevard/East Laurel Drive (#34)**: Mitigation Measure 3.10-21: Install southbound left turn lane. However, while the project could make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **Old Stage Road/Williams Road/Private Road (#36)**: Mitigation Measure 3.10-22: Install traffic signal. However, while the project could make a fair-share contribution to mitigate

its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **North Main Street/East Bernal Drive (#37)**: Mitigation Measure 3.10-23: Install a northbound through lane, add in a northbound right turn overlap phase, and convert the westbound through lane to a westbound shared through-left turn lane. However, while the project could make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **Sherwood Drive/Natividad Road & East Bernal Drive/La Posada Way (#38)**: Mitigation Measure 3.10-24. Install northbound and southbound through lanes. However, while the project could make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **South Davis Road/Blanco Road (#53)**: Mitigation Measure 3.10-25. Install a westbound left turn lane. However, while the project could make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **Salinas Street/North Main Street/West Market Street/East Market Street (#55)**: Mitigation Measure 3.10-26. Install an eastbound left turn lane and a southbound left turn lane. However, while the project could make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **South Main Street/West Blanco Road/East Blanco Road (#56)**: Mitigation Measure 3.10-27. Install a northbound left turn lane. However, while the project could make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **U.S. 101 Mainline Segments:** Implement the previously identified Mitigation Measure 3.10-9. Contribution to the TAMC RDIF Program and payment of the City of Salina's Traffic Impact Fees. The proposed mitigation for this impact is the project's required contribution to the TAMC Regional Development Impact Fee (RDIF) Program and the City of Salina's Traffic Impact Fee (TIF) Program. These programs include improvements to U.S. 101 that would improve mainline and ramp junction operations, which would mitigate this project impact.

The proposed project under the cumulative scenario would require the implementation of the following mitigation measures, as well as previously identified Mitigation Measures 3.10-1, 3.10-5, and 3.10-9, which are provided within the Traffic Impact Assessment developed by Fehr & Peers. However, even with implementation of these mitigation measures, the project would have a ***cumulatively considerable*** and ***significant and unavoidable*** impact under this scenario.

MITIGATION MEASURES

Mitigation Measure 3.10-15*: The project applicant shall provide its fair-share contribution for the installation of a traffic signal at intersection of U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road, prior to final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-16*: The project applicant shall provide its fair-share contribution for the installation of a traffic signal at intersection of U.S. 101 Northbound Ramps/Crazy Horse Canyon Road, prior to final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-17*: The project applicant shall provide its fair-share contribution for the installation of a traffic signal at intersection of Crazy Horse Canyon Road/San Juan Grade Road, prior to final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-18*: The project applicant shall provide its fair-share contribution for the installation of a traffic signal at intersection of Natividad Road/Rogge Road, prior to final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-19*: The project applicant shall provide its fair-share contribution for the installation of a traffic signal at intersection of Natividad Road/Russell Road, prior to final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-20*: The project applicant shall provide its fair-share contribution for the installation of southbound and westbound left turn lanes at the intersection of North Main Street/East Boronda Road, prior to final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-21*: The project applicant shall provide its fair-share contribution for the installation of a southbound left turn lane at the intersection of Constitution Boulevard/East Laurel Drive, prior to final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-22*: The project applicant shall provide its fair-share contribution for the installation of a traffic signal at intersection of Old Stage Road/Williams Road/Private Road, prior to final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-23*: The project applicant shall provide its fair-share contribution for the installation of a northbound through lane, the addition of a northbound right turn overlap phase,*

and the conversion of the westbound through lane to a westbound shared through-left turn lane at the intersection of North Main Street/East Bernal Drive, prior to final improvement plans. The final improvement plans shall note this improvement.

***Mitigation Measure 3.10-24**: The project applicant shall provide its fair-share contribution for the installation of a northbound and southbound through lanes at the intersection of Sherwood Drive/Natividad Road & East Bernal Drive/La Posada Way, prior to final improvement plans. The final improvement plans shall note this improvement.*

***Mitigation Measure 3.10-25**: The project applicant shall provide its fair-share contribution for the installation of a westbound left turn lane at the intersection of South Davis Road/Blanco Road, prior to final improvement plans. The final improvement plans shall note this improvement.*

***Mitigation Measure 3.10-26**: The project applicant shall provide its fair-share contribution for the installation of an eastbound left turn lane and a southbound left turn lane at the intersection of Salinas Street/North Main Street/West Market Street/East Market Street, prior to final improvement plans. The final improvement plans shall note this improvement.*

***Mitigation Measure 3.10-27**: The project applicant shall provide its fair-share contribution for the installation of a northbound left turn lane at the intersection of South Main Street/West Blanco Road/East Blanco Road, prior to final improvement plans. The final improvement plans shall note this improvement.*

***Mitigation Measure 3.10-28**: The project applicant shall provide its fair-share contribution for the installation of a northbound left turn lane at the intersection of South Main Street/West Blanco Road/East Blanco Road, prior to final improvement plans. The final improvement plans shall note this improvement.*

CUMULATIVE PLUS PROJECT WITH CENTRAL AREA SPECIFIC PLAN

The Cumulative Conditions Plus Project with CASP scenario models the overall change in traffic volumes in Salinas as a result of forecast development, with the addition of the proposed project and the CASP. The intent is to understand how the proposed project combined the CASP will influence travel behavior in light of future conditions, and to identify possible significant future impacts.

Intersections

The results of the intersection operations analysis for the Cumulative Plus Project and CASP conditions are shown in Table 3.10-25 below.

TABLE 3.10-25: CUMULATIVE PLUS PROJECT AND CASP INTERSECTION OPERATION ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
1	**U.S 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road**	**SSSC**	8.9 (19.8)	A (C)	**150 (>150)**	**F (F)**
2	**U.S 101 Northbound Ramps/Crazy Horse Canyon Road**	**SSSC**	2.3 (13.4)	A (B)	**5.3 (54.4)**	**A (F)**
3	U.S 101 Northbound Ramps/U.S 101 Southbound Ramps/Sala Road	AWSC	12.6	B	16.6	C
4	Harrison Road/Sala Road/Driveway	Signal	14.4	B	19.7	B
5	**Crazy Horse Canyon Road/San Juan Grade Road**	**AWSC**	**11.8**	**B**	**>150**	**F**
6	**Hebert Road/San Juan Grade Road**	**SSSC**	6.7 (14.6)	A (B)	**10.8 (45.7)**	**B (E)**
7	**Old Stage Road/Hebert Road**	**SSSC**	5.6 (15.0)	A (B)	**8.6 (36.3)**	**A (E)**
8	North Main Street/Harrison Road/Russell Road	Signal	18.3	B	32.3	C
9	Van Buren Avenue/Russell Road	Signal	45.6	D	29.8	C
10	San Juan Grade Road/Rogge Road	AWSC	23.1	C	17.3	C
11	San Juan Grade Road/Russell Road	Signal	47	D	47.8	D
12	**Natividad Road/Rogge Road**	**SSSC**	7.1 (13.4)	A (B)	**37.3 (125)**	**E (F)**
13	**Natividad Road/Russell Road**	**SSSC**	**>150 (>150)**	**F (F)**	**>150 (>150)**	**F (F)**
14	**San Juan Grade Road/Van Buren Avenue**	**SSSC**	**100.8 (>150)**	**F (F)**	**>150 (>150)**	**F (F)**
15	U.S 101 Southbound Ramps/Boronda Road	Signal	7.2	A	9.2	A
16	U.S 101 Northbound Ramps/Boronda Road	Signal	10.5	B	32.6	C
17	**North Main Street/Boronda Road**	**Signal**	52.8	D	**117.2**	**F**

TABLE 3.10-25: CUMULATIVE PLUS PROJECT AND CASP INTERSECTION OPERATION ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
18	North Main Street/San Juan Grade Road	Signal	16.3	B	45.1	D
19	San Juan Grade Road/Boronda Road	Signal	43.9	D	50.2	D
20	McKinnon Street/Boronda Road	Roundabout	17.1	C	12.0	B
21	El Dorado Drive/Boronda Road	Roundabout	21.2	C	23.1	C
22	**Natividad Road/Boronda Road**	**Roundabout**	22.4	C	**57.7**	**F**
23	Independence Boulevard/Boronda Road	Roundabout	23.3	C	11.9	B
24	Hemingway Drive/Boronda Road	Signal	53.3	D	25.1	C
25	Old Stage Road/Constitution Boulevard	AWSC	11.5	B	12.9	B
26	N Main Street/East Alvin Drive	Signal	43.3	D	44.7	D
27	Natividad Road/East Alvin Drive	Signal	34.5	D	17.4	B
28	Independence Boulevard/Constitution Boulevard	Signal	52.7	D	44.9	D
29	Boronda Road/Constitution Boulevard	Signal	35.3	D	46.3	D
30	U.S 101 Southbound Ramps/West Laurel Drive	Signal	14.5	B	17.7	B
31	U.S 101 Northbound Ramps/West Laurel Drive	Signal	9.4	A	16.8	B
32	**N Main Street/West Laurel Drive**	**Signal**	43.6	D	**161.3**	**F**
33	**Natividad Road/East Laurel Drive**	**Signal**	**118.7**	**F**	**116.8**	**F**
34	**Constitution Boulevard/East Laurel Drive**	**Signal**	**82.8**	**F**	**114.2**	**F**
35	**North Sanborn Road/Boronda Road**	**Signal**	30.6	C	**83.1**	**F**

TABLE 3.10-25: CUMULATIVE PLUS PROJECT AND CASP INTERSECTION OPERATION ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
36	**Old Stage Road/Williams Road/Private Road**	**SSSC**	**>150 (>150)**	**F (F)**	**>150 (>150)**	**F (F)**
37	**North Main Street/East Bernal Drive**	**Signal**	**61**	**E**	**75.7**	**E**
38	**Sherwood Drive/Natividad Road/East Bernal Drive/La Posada Way**	**Signal**	**105**	**F**	**165.7**	**F**
39	East Laurel Drive/North Sanborn Road	Signal	30.6	C	34.2	C
40	**Williams Road/East Boronda Road**	Signal	38	D	**108.2**	**F**
41	Freedom Parkway/Williams Road	Signal	27.9	C	54.5	D
42	Bardin Road/Bardin Way/Williams Road	Signal	26.5	C	31.3	C
43	East Market Street/Williams Road	Signal	23.7	C	53.4	D
44	John Street/Williams Road/East Alisal Street	Signal	14.2	B	28.1	C
45	South Sanborn Road/North Sanborn Road/John Street	Signal	37.3	D	39.5	D
46	Bardin Road/East Alisal Street/Driveway	AWSC	10.1	B	15.6	C
47	Skyway Boulevard/Airport Boulevard	SSSC	7.1 (10.2)	A (B)	20.6 (24.1)	C (C)
48	South Sanborn Road/North Sanborn Road/East Alisal Street	Signal	33.3	C	46.8	D
49	West Laurel Drive/Adams Street	Signal	19.6	B	22.6	C
50	North Davis Road/West Laurel Drive	Signal	36.3	D	54.3	D
51	**East Front Street/Sherwood Drive/Market Street**	**Signal**	28.7	C	**66.8**	**E**
52	East Market Street/East Front Street	Signal	11.3	B	21.1	C

TABLE 3.10-25: CUMULATIVE PLUS PROJECT AND CASP INTERSECTION OPERATION ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
53	**South Davis Road/Blanco Road**	**Signal**	**189.2**	**F**	**146.5**	**F**
54	Monterey Street/Monterey Street/East Market Street	Signal	24.2	C	32.4	C
55	**Salinas Street/North Main Street/West Market Street/East Market Street**	**Signal**	**98.3**	**F**	**102.3**	**F**
56	**South Main Street/West Blanco Road/East Blanco Road**	**Signal**	52.3	D	**71.8**	**E**

Source: Fehr & Peers, 2018
AWSC = All-Way Stop Control, SSSC = Side Street Stop Control, LOS = Level of Service
Notes:

- *Side-street stop-controlled (SSSC) intersection LOS is reported as: overall intersection delay and LOS (worst-case stop-controlled movement or approach delay and LOS).*
- *All-way stop controlled (AWSC) LOS is reported for the overall intersection, based on average delay per vehicle*

Overall, twenty-two intersections were found to operate below the local LOS thresholds set by the City.

Freeway Operation

The Travel Demand Model was used to forecast vehicle volumes on the ten study segments of U.S. 101. Table 3.10-26 shows the morning peak period results while Table 3.10-27 shows the evening results. LOS scores are compared to the minimum operating standards defined by the County CMP.

TABLE 3.10-26: AM CUMULATIVE PLUS PROJECT AND CASP FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Mainline Segments	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
San Juan Road to Crazy Horse Canyon Road	3,430	29.9	D	**3,970**	**38.2**	**E**
Crazy Horse Canyon Road to San Miguel Canyon Road	3,000	25.5	C	3,360	29.4	D
San Miguel Canyon Road to SR 156	**3,950**	**37.8**	**E**	**4,320**	**45.2**	**F**
SR 156 to Sala Road	3,600	32.4	D	3,410	30.0	D
Sala Road to Boronda Road	3,490	19.5	C	3,160	17.7	B

Boronda Road to Laurel Drive	4,040	22.6	C	3,420	19.1	C
Laurel Drive to N. Main Street/SR 183	3,930	22.0	C	3,150	17.6	B
N. Main Street/SR 183 to E. Market Street	3,330	18.4	C	2,530	14.2	C
SR 68 John Street to S. Sanborn Road	2,380	13.3	B	2,080	11.6	B
S. Sanborn Road to Abbott Street	2,620	14.6	B	1,790	10.0	A

[1] *Density Reported in Passenger Cars per Mile per Lane*
Source: Fehr & Peers, 2018

TABLE 3.10-27: PM CUMULATIVE PLUS PROJECT AND CASP HIGHWAY MAINLINE OPERATION ANALYSIS

Freeway Mainline Segments	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
San Juan Road to Crazy Horse Canyon Road	**4,640**	**54.0**	**F**	**3,840**	**36.0**	**E**
Crazy Horse Canyon Road to San Miguel Canyon Road	**3,780**	**35.0**	**E**	3,480	30.8	D
San Miguel Canyon Road to SR 156	**5,240**	**81.9**	**F**	**4,600**	**52.7**	**F**
SR 156 to Sala Road	**4,760**	**58.0**	**F**	3,650	33.1	D
Sala Road to Boronda Road	4,470	25.3	C	3,480	19.5	C
Boronda Road to Laurel Drive	4,660	26.6	D	4,050	22.7	C
Laurel Drive to N. Main Street/SR 183	4,390	24.8	C	4,190	23.5	C
N. Main Street/SR 183 to E. Market Street	3,730	20.9	C	3,980	22.3	C
SR 68 John Street to S. Sanborn Road	3,040	17.0	B	2,730	15.3	B
S. Sanborn Road to Abbott Street	2,380	13.3	B	3,260	18.2	C

[1] *Density Reported in Passenger Cars per Mile per Lane*
Source: Fehr & Peers, 2018

Two segments of U.S. 101 were found to operate below the LOS standard in the AM peak period and four segments were found to function below the LOS standard during the evening peak period.

Ramp Junctions

Capacity analyses for ramp junctions were analyzed at two interchanges along U.S. 101 in Salinas. The results of this analysis for Cumulative Plus Project scenario during the morning and evening peak period are shown in Table 3.10-28 and Table 3.10-29, respectively.

TABLE 3.10-28: AM CUMULATIVE PLUS PROJECT AND CASP RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
Boronda Road	Loop On-Ramp	24.8	C	Loop On-Ramp	14.2	B
	On-Ramp	22.3	C	Off-Ramp	26.8	C
West Laurel Drive	Off-Ramp	29.2	D	On-Ramp	21.3	C
	On-Ramp	25.5.	C	Loop On-Ramp	18.4	B
				Off-Ramp	24.3	C

Source: Fehr & Peers, 2018

TABLE 3.10-29: PM CUMULATIVE PLUS PROJECT AND CASP RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
Boronda Road	Loop On-Ramp	27.0	C	Loop On-Ramp	14.8	B
	On-Ramp	26.0	C	Off-Ramp	32.0	D
West Laurel Drive	Off-Ramp	32.6	D	On-Ramp	24.4	C
	On-Ramp	24.7	C	Loop On-Ramp	22.5	C
				Off-Ramp	30.9	D

Source: Fehr & Peers, 2018

All ramp junctions perform at or above the minimum standards set by the County CMP.

Impact 3.10-4: Under Cumulative Plus Project with Central Area Specific Plan conditions, implementation of the proposed Specific Plan may conflict with the performance measures established by the City of Salinas, Monterey County, and Caltrans (Cumulatively Considerable and Significant and Unavoidable)

As shown in Table 3.10-25 through 3.10-29, implementation of the Specific Plan would result in unacceptable operation at twenty-two of the study intersections, and four of the freeway segments,

under the cumulative Plus Project with CASP scenario. A This would be a ***potentially significant*** impact.

The reductions in automobile LOS attributable to WASP with CASP under the cumulative scenario include the following intersections:

- U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road (#1): LOS F during the PM peak hour
- U.S. 101 Northbound Ramps/Crazy Horse Canyon Road (#2): LOS F during the PM peak hour
- Crazy Horse Canyon Road/San Juan Grade Road (#5): LOS F during the PM peak hour
- Hebert Road/San Juan Grade Road (#6): LOS E during the PM peak hour
- Old Stage Road/Herbert Road (#7): LOS E during PM peak hour
- Natividad Road/Rogge Road (#12): LOS F during the PM peak hour
- Natividad Road/Russell Road (#13): LOS F during both peak hours
- San Juan Grade Road/Van Buren Avenue (#14): LOS F during both peak hours
- North Main Street/Boronda Road (#17): LOS F during the PM peak hour
- Natividad Road/Boronda Road (#22): LOS F during PM peak hour
- North Main Street/West Laurel Drive (#32): LOS F during the PM peak hour
- Natividad Road/East Laurel Drive (#33): LOS F during both peak hours
- Constitution Boulevard/East Laurel Drive (#34): LOS F during both peak hours
- North Sanborn Road/Boronda Road (#35): LOS F during PM peak hour
- Old Stage Road/Williams Road/Private Road (#36): LOS F during both peak hours
- North Main Street/East Bernal Drive (#37): LOS E during both peak hours
- Sherwood Drive/Natividad Road/East Bernal Drive/La Posada Way (#38): LOS F during both peak hours
- Williams Road/East Boronda Road (#40): LOS F During PM peak hour
- East Front Street/Sherwood Drive/Market Street (#51): LOS E during PM peak hour
- South Davis Road/Blanco Road (#53): LOS F during both peak hours
- Salinas Street/North Main Street/West Market Street/East Market Street (#55): LOS F during both peak hours
- South Main Street/West Blanco Road/East Blanco Road (#56): LOS E during PM peak hour

In addition, reductions in automobile LOS attributable to the WASP with CASP under the cumulative scenario would occur at the following freeway segments:

- San Juan Road to Crazy Horse Canyon Road (southbound): LOS F during the PM peak hour
- San Miguel Canyon Road to SR 156:
    - Northbound: LOS E during AM peak hour and LOS F during PM peak hour
    - Southbound: LOS E during AM peak hour and LOS F during PM peak hour

SR 156 to Sala Road (southbound): LOS F during the PM peak hour

All ramp junctions perform at or above the minimum standards set by the County CMP under this scenario.

With implementation of the mitigation measures included below, operation at all twenty-two of the affected intersections and the each of the freeway segments would be improved:

- **U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road (#1)**: Implement previously identified Mitigation Measure 3.10-15: install a traffic signal at this intersection. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **U.S. 101 Northbound Ramps/Crazy Horse Canyon Road (#2)**: Implement previously identified Mitigation Measure 3.10-16: install a traffic signal at this intersection. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **Crazy Horse Canyon Road/San Juan Grade Road (#5)**: Implement previously identified Mitigation Measure 3.10-17: Install traffic signal. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **Hebert Road/San Juan Grade Road (#6):** No feasible mitigation is available. The cumulative impact would be considered significant and unavoidable.

- **Old Stage Road/Hebert Road (#7):** Mitigation Measure 3.10-29: Install traffic signal. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **Natividad Road/Rogge Road (#12)**: Implement previously identified Mitigation Measure 3.10-18: Install traffic signal. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **Natividad Road/Russell Road (#13)**: Implement previously identified Mitigation Measure 3.10-19: Install traffic signal. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **San Juan Grade Road/Van Buren Avenue (#14)**: Implement previously identified Mitigation Measure 3.10-1. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **North Main Street/East Boronda Road (#17)**: Implement previously identified Mitigation Measure 3.10-20: Install southbound and westbound left turn lanes. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **Natividad Road/Boronda Road (#22):** No further physical improvements are possible at this location. This cumulative impact is considered significant and unavoidable.

- **North Main Street & West Laurel Drive (#32):** Implement the previously identified Mitigation Measure 3.10-4 **-** Optimize existing signal timings. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **Natividad Road/East Laurel Drive (#33)**: Mitigation Measure 3.10-30: Convert the existing eastbound right turn lane to a shared through-right turn lane. In addition, implement previously identified Mitigation Measure 3.10-5, which requires funding for the installation of northbound and southbound through lanes. However, even with implementation of these mitigation measures, this cumulative impact would be significant and unavoidable.

- **Constitution Boulevard/East Laurel Drive (#34)**: Mitigation Measure 3.10-31: Install an eastbound left turn lane. In addition, implement Mitigation Measure 3.10-21: Install southbound left turn lane. However, this cumulative impact is considered significant and unavoidable.

- **North Sanborn Road/Boronda Road (#35):** Mitigation Measure 3.10-32: Install a westbound left turn lane. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **Old Stage Road/Williams Road/Private Road (#36)**: Implement previously identified Mitigation Measure 3.10-22: Install traffic signal. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **North Main Street/East Bernal Drive (#37)**: Implement previously identified Mitigation Measure 3.10-23: Install a northbound through lane, add in a northbound right turn overlap phase, and convert the westbound through lane to a westbound shared through-left turn lane. However, even with this mitigation, this cumulative impact is considered significant and unavoidable.

- **Sherwood Drive/Natividad Road & East Bernal Drive/La Posada Way (#38)**: Implement previously identified Mitigation Measure 3.10-24. Install northbound and southbound through lanes. However, even with this mitigation, this cumulative impact is considered significant and unavoidable.

- **Williams Road/East Boronda Road (#40)**: Mitigation Measure 3.10-33: Install an eastbound left turn lane. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **East Front Street/Sherwood Drive/Market Street (#51)**: Mitigation Measure 3.10-34: Install a southbound left turn lane. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **South Davis Road/Blanco Road (#53)**: Implement Mitigation previously identified Measure 3.10-25. Install a westbound left turn lane. However, even with this mitigation, this cumulative impact is considered significant and unavoidable.

- **Salinas Street/North Main Street/West Market Street/East Market Street (#55)**: Implement previously identified Mitigation Measure 3.10-26. Install an eastbound left turn lane and a southbound left turn lane. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **South Main Street/West Blanco Road/East Blanco Road (#56)**: Implement previously identified Mitigation Measure 3.10-27. Install a northbound left turn lane. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **U.S. 101 Mainline Segments:** Implement the previously identified Mitigation Measure 3.10-9. Contribution to the TAMC RDIF Program and payment of the City of Salina's Traffic Impact Fees. The proposed mitigation for this impact is the project's required contribution to the TAMC RDIF Program and the City of Salina's TIF Program. These programs include improvements to U.S. 101 that would improve mainline and ramp junction operations, which would mitigate this project impact.

The proposed project under the cumulative scenario would require the implementation of the following mitigation measures, as well as previously identified Mitigation Measures 3.10-1, 3.10-5, 3.10-9, and 3.10-15 through 3.10-17, which are provided within the Traffic Impact Assessment developed by Fehr & Peers. However, even with implementation of these mitigation measures, the project would have a ***cumulatively considerable*** and ***significant and unavoidable*** impact under this scenario.

MITIGATION MEASURES

Mitigation Measure 3.10-29*: The project applicant shall provide its fair-share contribution for the installation of a traffic signal at intersection of Old Stage Road/Hebert Road, prior to final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-30*: The project applicant shall provide its fair-share contribution for the installation of northbound and southbound through lanes and for the conversion of the existing eastbound right turn lane to a shared through-right turn lane, prior to final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-31*: The project applicant shall provide its fair-share contribution for the installation of eastbound and southbound left turn lanes at Constitution Boulevard/East Laurel Drive, prior to final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-32*: The project applicant shall provide its fair-share contribution for the installation of a westbound left turn lane at the intersection of North Sanborn Road/Boronda Road, prior to final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-33*: The project applicant shall provide its fair-share contribution for the installation of an eastbound left turn lane at Williams Road/East Boronda Road, prior to final improvement plans. The final improvement plans shall note this improvement.*

Mitigation Measure 3.10-34*: The project applicant shall provide its fair-share contribution for the installation of a southbound left turn lane at the intersection of East Front Street/Sherwood Drive/Market Street, prior to final improvement plans. The final improvement plans shall note this improvement.*

Impact 3.10-5: Implementation of the proposed Specific Plan would not result in changes to air traffic patterns (No Impact)

The nearest air facility to the Specific Plan boundaries is Marina Municipal Airport, located approximately six miles to the southwest. Additionally, the Specific Plan Area contains no existing or planned airport facilities. The proposed land use changes to and development of the Specific Plan Area are expected to have no effect on the Marina Municipal Airport approach or departure zones, or any other airport approach or departure zones. Therefore, development attributable to the Specific Plan would be expected to have ***no impact*** to air traffic or air traffic patterns.

Impact 3.10-6: Implementation of the proposed Specific Plan would not substantially increase hazards due to a design feature (Less than Significant)

The Specific Plan Area is within the jurisdiction of the City of Salinas and is subject to all design standards which minimize hazards due to design features. The proposed land use changes that are estimated to add traffic to current and proposed streets would be carefully evaluated through the development review process. If needed, individual projects would be conditioned to construct or provide funding for improvements that minimize or eliminate potential hazards. Typical improvements include shoulder widening, adding turn pockets, adding sidewalks or crosswalks, realigning sharp curves, prohibiting certain turning movements, and signalizing intersections, among other options. Newly constructed and upgraded roadways needed to accommodate new development would be designed according to applicable state and local design standards.

New development allowed within the Specific Plan Area would include new streets, access points, pathways, and other circulation improvements that would be reviewed and checked for compliance

with design and safety standards as part of the entitlement process conducted by the City of Salinas. Therefore, this impact would be ***less than significant***.

Impact 3.10-7: Implementation of the proposed Specific Plan would not result in impacts related to emergency access (Less than Significant)

Buildout of the proposed Specific Plan would result in increased development densities and land use intensities within the Specific Plan Area. As a result of buildout of the WASP, which includes the development of an internal transportation network within the Plan Area, the volume of users travelling within the Specific Plan Area is expected to increase. Emergency access along proposed and existing roadways must be accommodated in conjunction within the expected population and employment growth. Plans submitted for individual developments to be constructed in the Specific Plan Area would be reviewed for compliance with emergency access requirements by public safety officials during the City's entitlement process. Given these conditions, any impacts to emergency access are anticipated to be ***less than significant***.

Impact 3.10-8: Implementation of the proposed Specific Plan would not conflict with adopted multi-modal circulation policies, plans, or programs, and would not decrease the performance or safety of public transit, bicycle, or pedestrian facilities (Less than Significant with Mitigation)

Impacts to Pedestrians and Bicyclists: Overall, existing plans and policies are supportive of bicycling and walking within the City of Salinas. City policies related to biking and walking are defined in the existing General Plan Circulation Element through Goal C-4 and Goal C-5. Together, these goals set citywide policies that provide for safe and accessible bicycle and pedestrian facilities. Additionally, the 2002 *Salinas Bikeways Plan* and 2004 *Salinas Pedestrian Plan* provide prioritized lists of projects and programs in service of the above goals. In accordance with the standards of significance, the WASP would be found to have significant impacts on the bicycle and pedestrian network to the extent that it interferes with existing plans or policies related to biking and/or walking.

As estimated by Fehr & Peers (2018), he proposed project is expected to generate approximately 2,400 daily walking and biking trips; 300 of which are anticipated in the morning peak hour and 260 of which are anticipated in the evening peak hour. The proposed project includes specifications to include new bicycle and pedestrian facilities that will provide access to the site.

Implementation of the Specific Plan would be consistent with, and would expand upon, the pedestrian and bicycle network identified in the 2002 *Salinas Bikeways Plan*. The Specific Plan would improve the existing bicycle and pedestrian circulation infrastructure within the Specific Plan Area, as well as adjacent areas in the City of Salinas. Currently, a Class II bicycle facility is proposed for San Juan Grade Road between East Boronda Road and Cornwall Street, as provided within the 2002 *Salinas Bikeways Plan*. The extent of this proposed facility is approximately coterminous with the western boundary of the Plan Area. In addition to the retail shops and residences planned as part of

the WASP, a high school is also planned along a future extension of Russell Road, which intersects the proposed Class II bicycle facility. Therefore, San Juan Grade Road would serve as an important connection between the amenities within the Plan Area and the rest of the City, which is already well-served by bicycle facilities.

San Juan Grade Road is planned with a shared-use path on one side for bicycles and pedestrians. Ultimately, the planned pedestrian and bicycle circulation networks, as well as policies pertaining to pedestrian and bicycle circulation, encourage active transportation. Impacts related to pedestrians and bicyclists would be ***less than significant***.

Impacts to Public Transit: Implementation of the proposed Specific Plan is expected to increase population and employment within the Specific Plan Area, as well as the City of Salinas. According to Policy C-3.1 and Policy C-3.2 of the current Salinas General Plan, the City shall support Monterey-Salinas Transit (MST) in developing frequent and effective public transportation service, including to new development areas. The WASP is estimated to generate approximately 1,000 new transit trips on a daily basis, as well as 140 trips in the morning peak hour and 150 trips in the evening peak hour (Fehr & Peers, 2018). These new transit trips alone are not expected to overburden existing transit service in the area. Additionally, this project does not conflict with an existing transit-related policy or plan in the City.

The City would work with the project applicant and MST to explore the potential to implement a branch of Route 49 that operates at certain times of day such that it can accommodate students travelling to the planned high school on Russell Road. A special time-of-day school-oriented transit service would provide alternative means for students to travel to and from school. Such a branch would also provide service between the high school and the nearby Northridge Mall. The City would also work with the project applicant to provide enhanced shelters at some bus stops to improve the conditions for transit riders who are waiting for a bus – such as on Russell Road, East Boronda Road and McKinnon Street (adjacent from existing school), and Boronda and Independence Boulevard (adjacent from existing school). With implementation of this mitigation measures, the proposed project would have a ***less than significant*** impact on public transit service.

Conclusion: Impacts to pedestrians and bicycles would be ***less than significant***. In addition, with implementation of the following mitigation measures, impacts to public transit would be ***less than significant*** and no further mitigation is required.

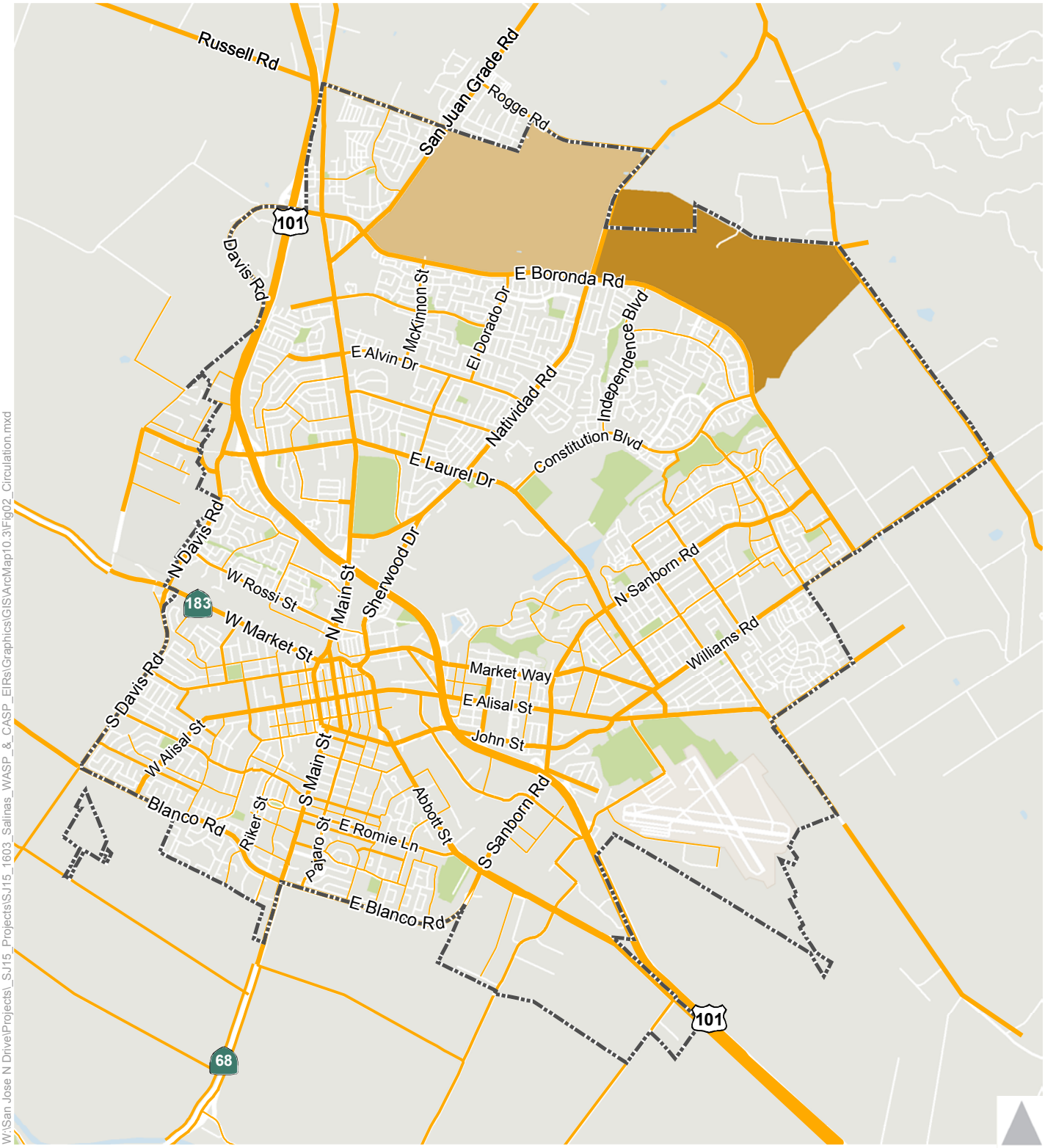
MITIGATION MEASURES

Mitigation Measure 3.10-35*: Prior to the start of operation of any buildings within the Plan Area, the project applicant shall either (1) work with Monterey-Salinas Transit to provide adequate funding implement a branch of Route 49 that operates at certain times of day such that it can accommodate students travelling to the planned high school on Russell Road, or (2) provide a special time-of-day school-oriented transit service that would provide alternative means for students to travel to and*

from school. Such a branch would also provide service between the high school and the nearby Northridge Mall.

Mitigation Measure 3.10-36*: Prior to the start of construction, the project applicant shall work with the City of Salinas to determine the potential viability of installation of enhanced shelters at some bus stops to improve the conditions for transit riders who are waiting for a bus – such as on Russell Road, East Boronda Road and McKinnon Street (adjacent from existing school), and Boronda and Independence Boulevard (adjacent from existing school).*

This page left intentionally blank.



Source: City of Salinas

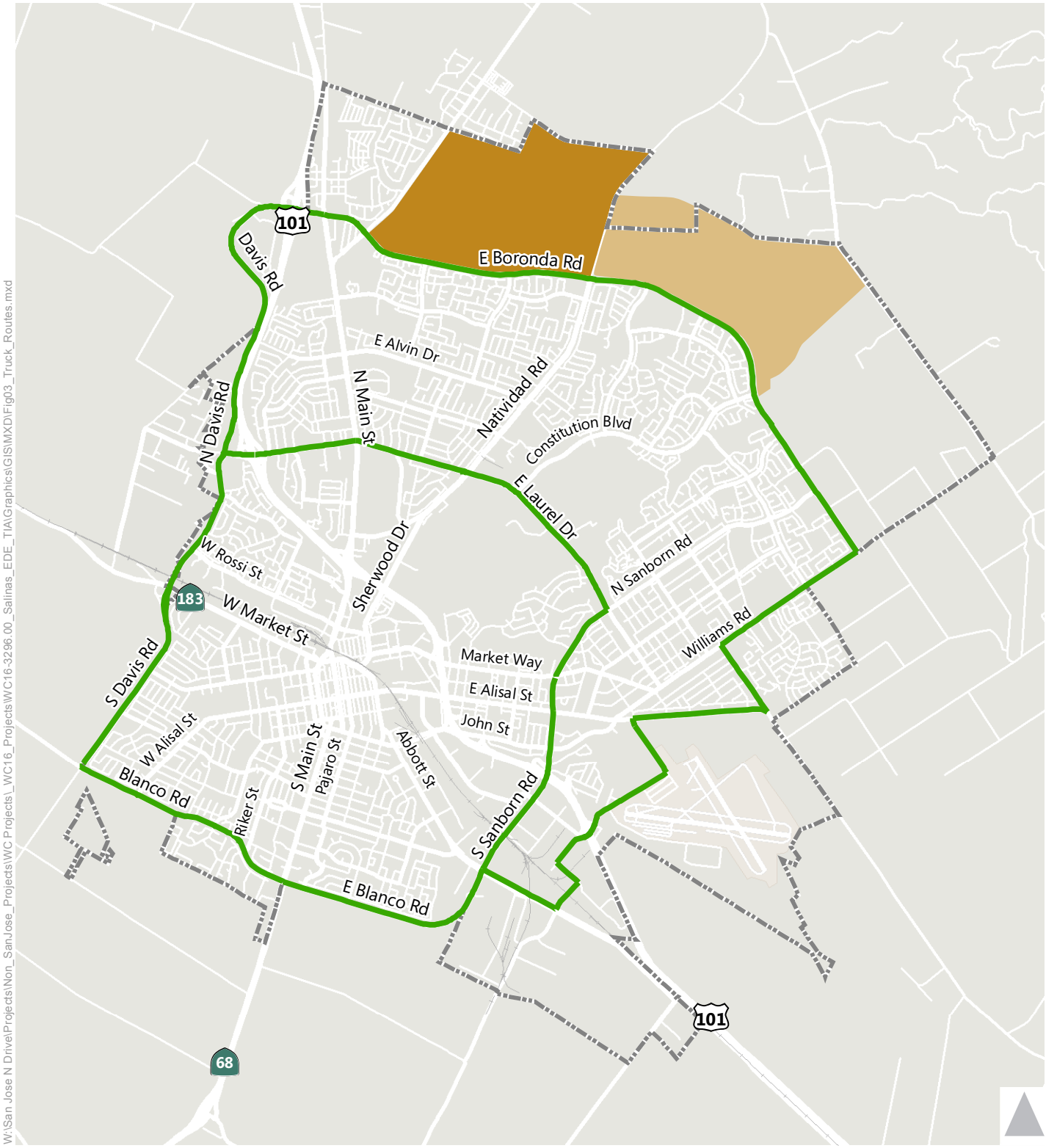
Circulation System

- Freeway/New Interchange
- At-Grade Rural Highway
- Major Arterial
- Minor Arterial
- Collector
- City Limits
- West Area Specific Plan (WASP)
- Central Area Specific Plan (CASP)

Figure 3.10-1

Salinas Circulation Network

This page left intentionally blank.



Source: City of Salinas

Truck Routes

Existing Truck Routes

City Limits

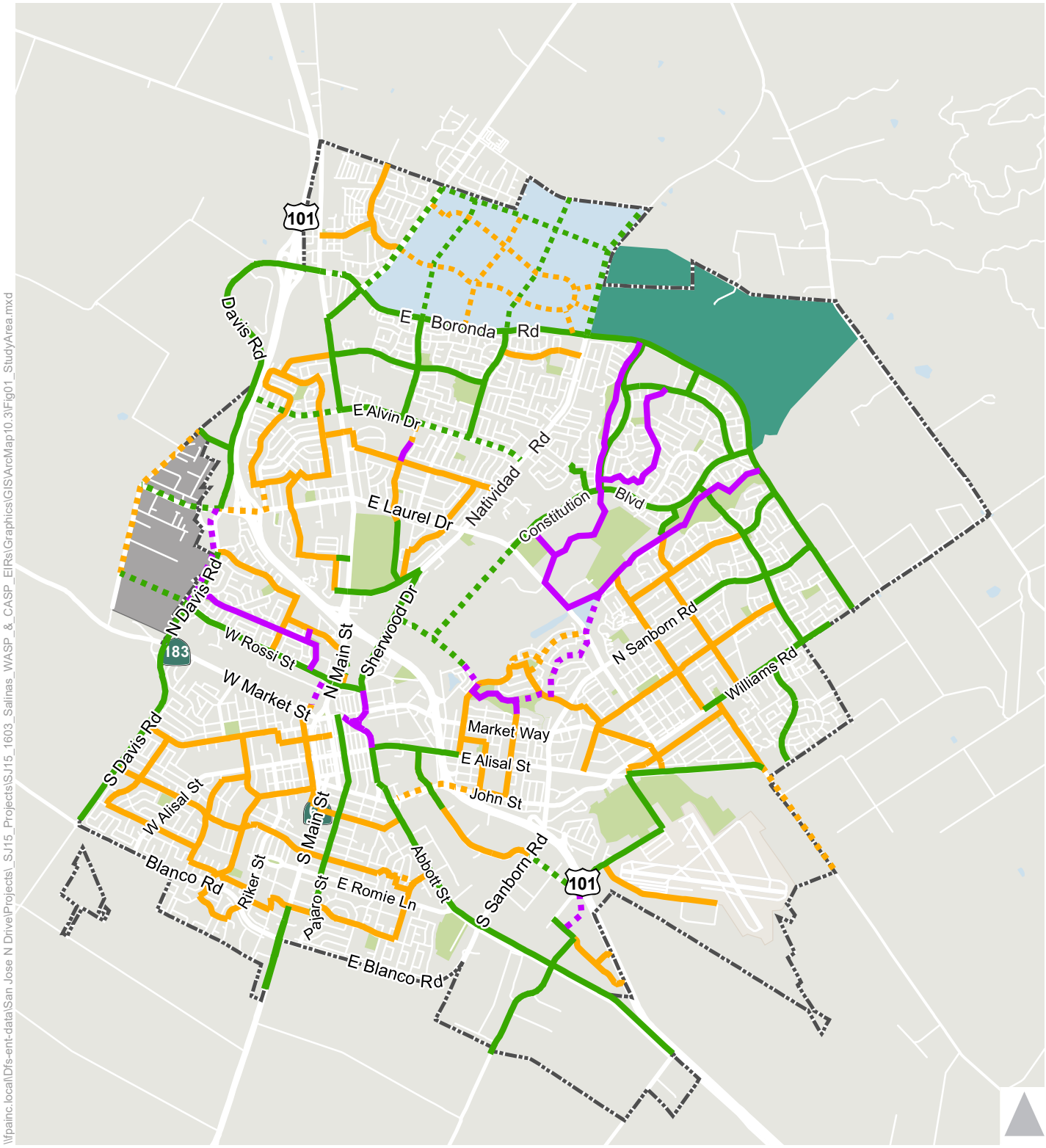
West Area Specific Plan (WASP)

Central Area Specific Plan (CASP)

Figure 3.10-2

City of Salinas Truck Routes

This page left intentionally blank.



\\fpainc.local\Dfs-ent-data\San Jose N Drive\Projects_SJ15_Projects\SJ15_1603_Salinas_WASP_&_CASP_EIRs\Graphics\GIS\ArcMap10.3\Fig01_StudyArea.mxd

Source: City of Salinas

Bike Plan

- Class I: Path (Existing)
- Class II: Lane (Existing)
- Class III: Route (Existing)
- City Limits
- Class I: Path (Proposed)
- Class II: Lane (Proposed)
- Class III: Route (Proposed)
- West Area Specific Plan (WASP)
- Central Area Specific Plan (CASP)

Figure 3.10-3

Existing and Planned Bicycle Facilities

This page left intentionally blank.

Source: Monterey-Salinas Transit

Legend

- 20 Salinas - Monterey *via Marina*
- 21 Pebble Beach - Salinas Express
- 23 Salinas - King City
- 25 CSUMB - Salinas
- 28 Watsonville - Salinas *via Castroville*
- 29 Watsonville - Salinas *via Prunedale*
- 41 Northridge - Salinas *via East Alisal*
- 42 Westridge - Spreckles *via East Salinas*
- 43 South Salinas - Salinas *via SVMH*
- 44 Northridge - Salinas *via Westridge*
- 45 Northridge - Salinas *via East Market*
- 46 Natividad - Salinas
- 47 Hartnell - Alisal Campus
- 48 Salinas - Salinas Airport Business Center
- 49 Salinas - Santa Rita *via Northridge*
- 56 Monterey - Salinas *via Hwy 68*
- 61 Salinas - VA - DOD Clinic
- 72 Presidio - N. Salinas Express
- 82 Fort Hunter Liggett - Salinas Express
- 85 Fort Hunter Liggett - Templeton
- 86 King City - San Jose *via San Jose Airport*
- 95 Northridge - Williams Ranch

Transit Center

Select Trips (See Riders Guide)

Direction of Route

Route Terminus (41 Northridge)

Multiple routes serve this section

Place of Interest

School

Public Place

Airport

Shopping Mall

Park or Golf Course

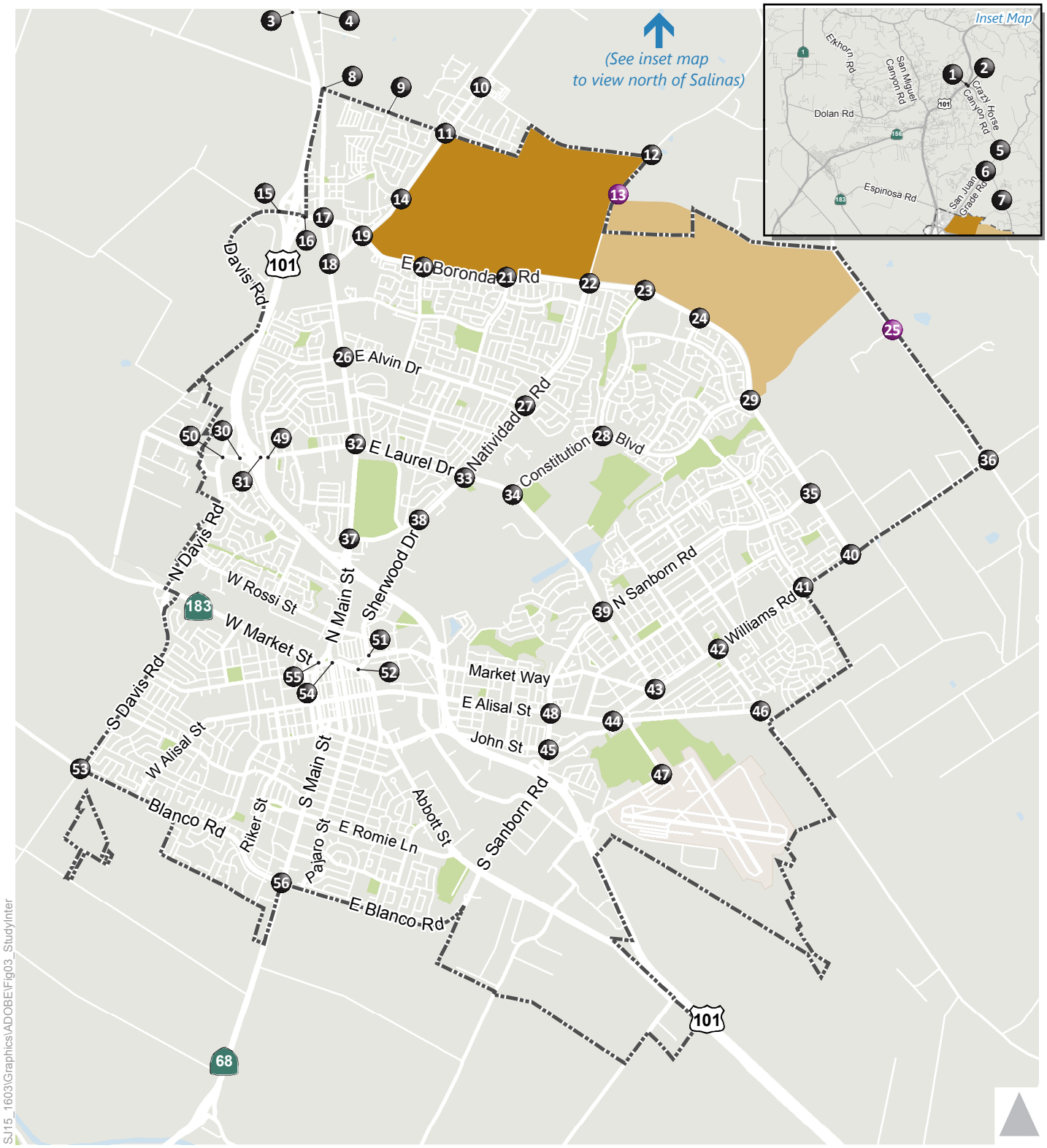
Major Terminus

Salinas Transit Center

Figure 3.10-4

Existing Transit Service

This page left intentionally blank.



Source: City of Salinas

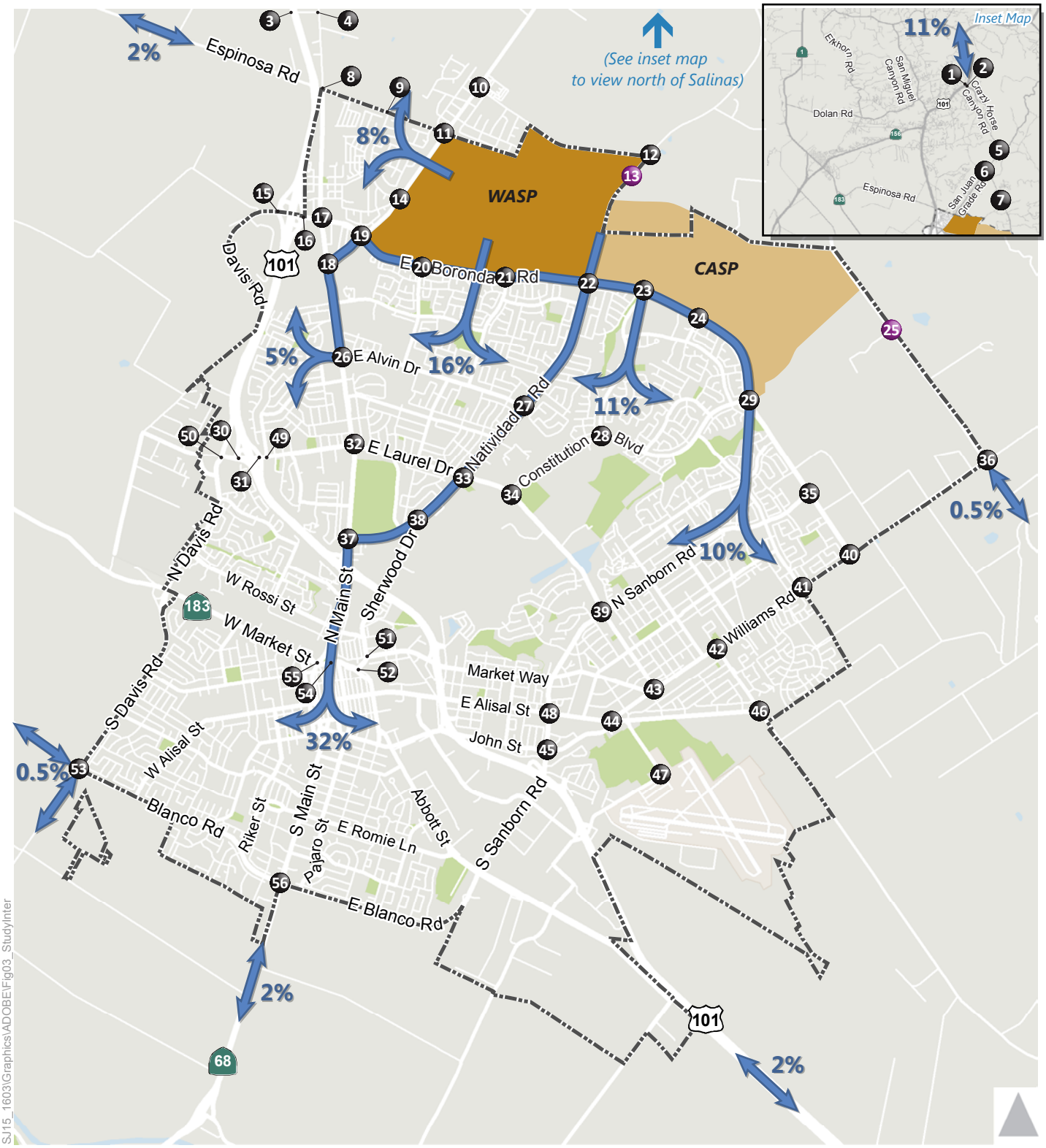
Legend

- Study Intersection
- Future Study Intersection
- West Area Specific Plan (WASP)
- Central Area Specific Plan (CASP)
- City Limits

Figure 3.10-5

Study Intersections

This page left intentionally blank.



Source: City of Salinas

Legend

- Study Intersection
- Future Study Intersection
- XX% Trip Distribution Percentage
- West Area Specific Plan (WASP)
- Central Area Specific Plan (CASP)
- City Limits

Figure 3.10-6

Project Trip Distribution

This page left intentionally blank.

This section describes the regulatory setting, impacts associated with wastewater services, water services, storm drainage, and solid waste disposal that are likely to result from project implementation, and measures to reduce potential impacts to wastewater, water supplies, storm drainage, and solid waste facilities.

This section is based in part on the following documents, reports and studies: CalRecycle *Solid Waste Information System (CalRecycle, 2015),* CalRecycle *Jurisdiction Diversion/Disposal Rate Summary (CalRecycle, 2014), Sewer System Management Plan: Sanitary Sewer Collection System (City of Salinas, 2014), City of Salinas Sanitary Sewer System Master Plan (City of Salinas, 2011), Monterey Regional Water Pollution Control Agency Sewer System Management Plan (MRWPCA, 2013), City of Salinas 2010 Municipal Service and Sphere of Influence Review (City of Salinas, 2010)*, *California Water Service Company 2010 Urban Water Management Plan (Cal Water, 2011)*, *the Salinas District Water Conservation Master Plan*, *West Area Specific Plan Salinas California SB610 Water Supply Assessment (Cal Water, 2015)*, *California Water Service Company Public Draft 2015 Urban Water Management Plan (Cal Water, 2016)*, *Hydrology and Water Quality Technical Study for West Area Specific Plan EIR (Balance Hydrologics, 2016)*, and correspondence with Jennifer Gonzalez, Engineering Manager for the MRWPCA Regional Treatment Plant (Treatment Plant or Plant).

Comments were received during the public review period for the Notice of Preparation regarding storm water from the Northern Salinas Valley Mosquito Abatement District, in reference to State Guidelines as they pertain to Mosquito Best Management Practices. No other comments were received during the public review period for the Notice of Preparation.

3.11.1 WASTEWATER SERVICES

EXISTING SETTING

The Monterey Regional Water Pollution Control Agency (MRWPCA) provides regional wastewater conveyance, treatment, disposal, and wastewater recycling services to customers in northern Monterey County including the City of Salinas. The MRWPCA serves the City with the Salinas Pump Station and the Salinas interceptor. Wastewater from the City of Salinas is treated at the MRWPCA Regional Treatment Plant. Approximately 51 percent of the total flow to the Treatment Plant is sent from the City of Salinas (MRWPCA, 2013).

Currently, there is not a public sewer system within the Plan Area. The City of Salinas provides its residents with sewer collection facilities and maintenance. The City's Wastewater Division of the Public Works Department under the direction of the Public Works Director and the Environmental and Maintenance Services Director, is responsible for operation and maintenance of the City's sanitary sewer collection system. The City's Wastewater Manager is the lead person to plan and implement these responsibilities. As of 2014, City staffing for operation and maintenance of the sanitary sewer system includes 7.75 full time equivalent (FTE) employees. Additionally, as of 2014, the Wastewater Division had 11.25 FTE additional staff that is funded through storm sewer, industrial waste or street sweeping programs (City of Salinas, 2014).

Wastewater Conveyance

The existing wastewater collection system is owned and operated by the City of Salinas. The City maintains approximately 270 miles of sanitary sewer collection system pipeline and 11 sanitary sewer lift stations. Flow in the City system is primarily by gravity, with low-head pump stations located at low spots due to the City's flat topography.

Sanitary wastewater produced in the City is conveyed through the City's conveyance facilities to the former City treatment plant site, known as "TP1". The plant closed when the MRWPCA Treatment Plant began service. From that location it is pumped via the MRWPCA's Salinas Pump Station and Salinas Interceptor pipeline to the MRWPCA treatment plant in Marina. The primary components of the City's collection system include five trunk lines, 14 pump stations, and a system of smaller collection facilities that convey wastewater from individual homes, businesses, and other developed uses to the trunk lines and pump stations.

The City has completed several sewer projects over the past decade. These include the replacement of the Rossi/Bridge Street sewer trunk line, the replacement of 1,600 feet of sewer main on Kern Street, the rehabilitation of deteriorated manhole structures on the Romie Lane - South Main Street trunk line, the installation of backup power generators to three additional sanitary sewer lift stations, and the installation of additional flow meters (City of Salinas, 2014).

Due to the potential for sanitary sewer overflows, pollutants of concern include raw sewage, bacteria and other chemical waste illegally placed in the waste stream. Due to concerns for public health and potential environmental impacts, the City of Salinas has given the sanitary sewer collection system a High Priority status. In response to this status, the City maintains a comprehensive maintenance schedule for collection system pipes and for sanitary sewer lift stations. The City has also developed a written spill response plan that is a guide for sanitary sewer and other hazardous spills. Spill responses depending on severity and notification procedures are a collaborative effort that may involve response by the Public Works Department in conjunction with the Salinas Fire Department, Monterey County Environmental Health and other state and local agencies.

The City's Sanitary Sewer Maintenance and Management history addresses and reduces the potential for sanitary sewer overflows. According to the City's 2014 *Sewer System Management Plan*, the City's 270 miles of sanitary sewer pipeline over the past several years has experienced less than five overflows each year. Effective spill response and containment has kept overflow quantities low. The City maintains sanitary sewer overflow records in accordance with State of California Water Resources Control Board, WDR Order 2006-0003-DWQ.

The sewer collection system for the Plan Area will be connected to the existing 24-inch sewer trunk line on McKinnon Street at the intersection with East Boronda Road. However, the elevation at the connection point on McKinnon Street and the lowest point of the northwest area of the Plan Area are very similar, making it difficult to connect with a gravity system. Therefore, the proposed sewer collection system for the northwest area of the Plan Area may need to be connected to the existing 10-inch sewer system on Van Buren Avenue near San Juan Grade Road. The proposed sewer collection system for the remainder of the Plan Area would connect to the aforementioned existing

24-inch sewer trunk line on McKinnon Street. The City would provide and maintain sewer collection once the infrastructure is installed and development is established. The proposed sanitary sewer collection system would convey flow to the City's existing sewers by gravity without the need of any sewer pump stations.

All sanitary wastewater collected by the City's system flows to the MRWPCA's Salinas Pump Station, located at the southwestern boundary of the City. The MRWPCA is a regional authority that owns and operates the regional wastewater treatment facility serving the City and other member agencies in the Monterey vicinity. MRWPCA's Salinas Pump Station conveys sanitary wastewater discharges to the regional treatment facility via a MRWPCA force main.

Wastewater Treatment

MRWPCA's Regional Treatment Plant is located two miles north of the City of Marina in Northern Monterey County. The Plant began operation in 1990, replacing six local wastewater treatment facilities. The MRWPCA Treatment Plant serves a population of approximately 252,000, as of 2014 (RWQCB - Central Coast Region, 2014). The Waste Discharge Requirements (WDRs) Order No. R3-2014-0013 allows the MRWPCA Regional Treatment Plant to accept up to 29.6 million gallons per day (MGD). As of 2014, the Plant treated approximately 21 MGD (RWQCB Central Coast, 2014). Due to water conservation efforts in recent years, the Plant currently treats approximately 16 MGD, of which the City of Salinas contributes 12 MGD [1]. The MRWPCA Regional Treatment Plant provides regional wastewater treatment, disposal, and reclamation facilities for the cities of Monterey, Pacific Grove, Del Rey Oaks, Sand City, Marina, and Salinas; the Seaside County Sanitation District; the Castroville, Moss Landing and Boronda Community Services Districts; and Fort Ord.

WASTEWATER QUALITY

The MRWPCA's Waste Discharge Requirement (WDR) specifies that effluent from the MRWPCA Regional Treatment Plant must not exceed the limits presented in Table 3.11-1 (WDR Recycled Effluent Discharge Limitations), as measured at Monitoring Location EFF-001 (*Waste Discharge Requirements for the Monterey Regional Water Pollution Control Agency Regional Treatment Plant* Order No. R3-2014-0013, NPDES No. CA0048551).

TABLE 3.11-1: WDR RECYCLED EFFLUENT DISCHARGE LIMITATIONS

CONSTITUENT	*UNITS*	*MONTHLY AVERAGE*	*DAILY MAXIMUM*
$CBOD_5$	mg/L	25	85
TSS	mg/L	30	90
Settleable Solids	mL/L/hr	1.0	3.0
Turbidity	NTU	75	230
Oil & Grease	Mg/L	25	75
Total coliform bacteria	MPN/100 mL	1,000	--
pH(1)	Average Daily: 6.0 < pH < 9		

(1) No individual excursions from the range of pH values shall exceed 60 minutes.

SOURCE: CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD, ORDER NO. R3-2014-0013, NPDES NO. CA0048551

[1] Email correspondence with Jennifer Gonzalez, MRWPCA Treatment Plant Engineer, at 2:15pm on 2/25/2016.

Additionally, the following effluent limitations for toxic pollutants are presented below in Table 3.11-2: Effluent Limitations for the Protection of Marine Aquatic Life and Table 3.11-3: Effluent Limitations for the Protection of Human Health.

TABLE 3.11-2: EFFLUENT LIMITATIONS FOR THE PROTECTION OF MARINE AQUATIC LIFE

POLLUTANT	*UNITS*	*6-MONTH MEDIAN*	*DAILY MAXIMUM*
Cadmium	lb/day	36	140
Chromium (Hexavalent)	lb/day	72	290
Lead	lb/day	72	290
Selenium	lb/day	540	2,200
Silver	lb/day	20	95
Cyanide	lb/day	36	140
Total Residual Chlorine	lb/day	72	290
Acute Toxicity	TUa	--	4.7
Chronic Toxicity	TUc	--	150
Phenolic Compounds (non-chlorinated)	lb/day	1,100	4,300
Endosulfan	lb/day	0.32	0.65
Endrin	lb/day	0.072	0.14
HCH	lb/day	0.14	0.29
Radiactivity	Not to exceed limits specified in California Code of Regulations, Title 22, Division 4, Chapter 15, Article 5, Section 64443.		

SOURCE: CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD, ORDER NO. R3-2014-0013, NPDES NO. CA0048551

TABLE 3.11-3: EFFLUENT LIMITATIONS FOR THE PROTECTION OF HUMAN HEALTH

POLLUTANT	*UNITS*	*30-DAY AVERAGE DAILY MAXIMUM*
Non-Carcinogens		
Acrolein	lb/day	7,900
Antimony	lb/day	43,000
Bis(2-Chloroethoxy)Methane	lb/day	160
Bis(2-Chloroisopropyl)Ether	lb/day	43,000
Chlorobenzene	lb/day	21,000
Di-n-Butyl Phthalate	lb/day	130,000
Dichlorobenzens	lb/day	180,000
Diethyl Phthalate	lb/day	1,200,000
Dimethyl Phthalate	lb/day	30,000,000
2-Methyl-4,6-Dinitrophenol	lb/day	7,900
2-4 Dinitrophenol	lb/day	140
Ethylbenzene	lb/day	150,000
Fluoranthene	lb/day	540
Hexachlorocyclopentadiene	lb/day	2,100
Nitrobenzene	lb/day	180
Thallium	lb/day	72
Toluene	lb/day	3,100,000
Tributylin	lb/day	0.050
1,1,1-Trichloroethane	lb/day	19,000,000
Carcinogens		
Acrylonitrile	lb/day	3.6
Aldrin	lb/day	0.00079
Benzene	lb/day	210
Benzidine	lb/day	0.0025
Beryllium	lb/day	1.2
Bis(2-Chloroehtyl)Ether	lb/day	1.6

Bis(2-Ethylhexyl)Phthalate	lb/day	130
Carbon Tetrachloride	lb/day	32
Chlordane	lb/day	0.00083
Chlorodibromomethane	lb/day	310
Chloroform	lb/day	4,700
1,4 Dichlorobenzene	lb/day	650
3,3'-Dichlorobenzidine	lb/day	0.29
1,2-Dichloroethane	lb/day	1,000
1,1-Dichloroehtylene	lb/day	32
Dichlorobromomethane	lb/day	220
Dichloromethane (Methylene Choride)	lb/day	16,000
1,3-Dichloropropene	lb/day	320
Dieldrin	lb/day	0.0014
2,4-Dinitrotoluene	lb/day	94
1,2-Diphenylhydrazine	lb/day	5.8
Halomethanes	lb/day	4,700
Heptachlor	lb/day	0.0018
Heptachlor Epoxide	lb/day	0.00072
Hexachlorobenzene	lb/day	0.0076
Hexachlorobutadiene	lb/day	500
Hexachloroethane	lb/day	90
Isophorone	lb/day	26,000
N-Nitrosodimethylamine	lb/day	260
N-Nitrosodi-n-Propylamine	lb/day	14
N-Nitrosodiphenylamine	lb/day	90
PAHs (total)	lb/day	0.32
PCBs	lb/day	0.00068
TCDD Equivalents	lb/day	1.4E-07
1,1,2,2-Tetrachloroethane	lb/day	83
Tetrachloroethylene	lb/day	72
Toxaphene	lb/day	0.0076
Trichloroethylene	lb/day	970
1,1,2-Trichloroethane	lb/day	340
2,4,6-Trichlorophenol	lb/day	10
Vinyl Chloride	lb/day	1,300

SOURCE: CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD, ORDER NO. R3-2014-0013, NPDES NO. CA0048551

The Central Coast RWQCB regulates the MRWPCA Regional Treatment Plant and use of recycled water through Board Order Number R3-2014-0013. The Order requires that the MRWPCA comply with applicable state and local requirements regarding the production and use of recycled wastewater, including requirements of California Water Code (CWC) sections 13500 – 13577 (Water Reclamation) and Department of Public Health regulations at title 22, sections 60301 – 60357 of the California Code of Regulations (Water Recycling Criteria).

Future Demand

The City of Salinas Sanitary Sewer Master Plan projects new development would increase the total wastewater discharge to an average dry weather flow up to a maximum of approximately 22.1 MGD at full build-out of the entire City Sphere of Influence. Wastewater generated by the proposed project is estimated to be approximately 1.0 MGD, as described in Table 3.11-4, below.

TABLE 3.11-4: PROPOSED PROJECT SEWER GENERATION ESTIMATE[1]

USE	*CALCULATION*[1]	*ACRE FEET PER YEAR*	*AVERAGE GPD*[4]
Retail/Services	214.4 AFY @ 90%[2]	193.0	172,321
Residential	1,562.3 AFY @ 50%[3]	781.2	697,464
Schools	356.5 AFY @ 50%[3]	178.3	159,188
TOTAL		**1,152.5**	**1,028,973**

[1] Calculations in this table are derived from water demand estimates from the Final Supplement for the Salinas General Plan Program EIR, Appendix E, Water Supply Assessment – Cal Water.
[2] A typical estimate for retail/services sewer demand is 90% of water demand
[3] A typical estimate for residential and school sewer demand is 50% of water demand. Approximately 50% of residential and school water is used for landscape irrigation.
[4] Gallons per day

Table 3.11-5 provides a summary of the City's Capital Improvement Program (CIP) recommended sewer improvements by category.

TABLE 3.11-5: SUMMARY OF RECOMMENDED SANITARY SEWER IMPROVEMENTS

TYPE	*QUANTITY*	*UNIT*	*CAPITAL COST (2010 $ MILLION)*
Capacity Improvements			
Gravity Sewers	37,400	Feet	$23.1
Force Mains	1,260	Feet	$0.5
Pump Station Upgrades	185	Horsepower	$2.2
		Subtotal	*$25.8*
Rehabilitation/Replacement Improvements			
Sewers	2,290	Feet	$0.3
Emergency Bypasses at Pump	7	Each	$2.5
		Subtotal	$2.8
GRAND TOTAL		**1,152.5**	**$28.6**

SOURCE: CITY OF SALINAS SANITARY SEWER SYSTEM MASTER PLAN, 2011.

The Treatment Plant treated approximately 21 MGD in 2014, and due to recent conservation efforts, currently treats an average of approximately 16 MGD (MRWPCA Treatment Plant Engineer Jennifer Gonzalez, 2016). Over the past 25 years, since the Treatment Plant began operation, flow rates to the Plant have continued to decrease due to water conservation, drought, and other factors. The Treatment Plant has plans to increase its solids handling capability. The Treatment Plant currently has two screwpresses online, and it is anticipated that the Plant would purchase and install a third sometime in the next 10 years (MRWPCA Treatment Plant Engineer Jennifer Gonzalez, 2016).

REGULATORY SETTING - WASTEWATER

Clean Water Act (CWA) / National Pollutant Discharge Elimination System (NPDES) Permits

The CWA is the cornerstone of water quality protection in the United States. The statute employs a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical,

and biological integrity of the nation's waters so that they can support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water."

The CWA regulates discharges from "non-point source" and traditional "point source" facilities, such as municipal sewage plants and industrial facilities. Section 402 of the Act creates the NPDES regulatory program which makes it illegal to discharge pollutants from a point source to the waters of the United States without a permit. Point sources must obtain a discharge permit from the proper authority (usually a state, sometimes EPA, a tribe, or a territory). NPDES permits cover industrial and municipal discharges, discharges from storm sewer systems in larger cities, storm water associated with numerous kinds of industrial activity, runoff from construction sites disturbing more than one acre, mining operations, and animal feedlots and aquaculture facilities above certain thresholds.

Permit requirements for treatment are expressed as end-of-pipe conditions. This set of numbers reflects levels of three key parameters: (1) biochemical oxygen demand (BOD), (2) total suspended solids (TSS), and (3) pH acid/base balance. These levels can be achieved by well-operated sewage plants employing "secondary" treatment. Primary treatment involves screening and settling, while secondary treatment uses biological treatment in the form of "activated sludge."

All so-called "indirect" dischargers are not required to obtain NPDES permits. An indirect discharger is one that sends its wastewater into a city sewer system, so it eventually goes to a sewage treatment plant. Although not regulated under NPDES, "indirect" discharges are covered by another CWA program called pretreatment. "Indirect" dischargers send their wastewater into a city sewer system, which carries it to the municipal sewage treatment plant, through which it passes before entering surface water.

The City's current NPDES Permit, which regulates the wastewater effluent quantity and quality upon discharge was issued by the Central Coast Regional Water Quality Control Board and is Order R3-2014-0013; NPDES No. CA0048551.

City of Salinas General Plan

The Salinas General Plan establishes the following policies and requirements relative to wastewater in the General Plan:

CONSERVATION/OPEN SPACE ELEMENT

Policy COS-1.6: Enforce national (NPDES) requirements and participate in regional efforts to protect and enhance water quality.

LAND USE ELEMENT

Policy LU-7.2: Review development proposals to ensure that adequate sewer collection and treatment facilities are available to meet the needs of the development without negatively impacting the existing community.

Policy LU-7.3: Maintain the existing sewer system to provide a high level of service to existing neighborhoods.

City of Salinas General Plan EIR

The following mitigation measures were established in the City of Salinas General Plan EIR to reduce impacts to wastewater:

> **Mitigation Measure HW12.** The City will implement Implementation Program COS6 on an ongoing basis. Implementation Program COS6 requires the City, in cooperation with the state, regional, and local water agencies and suppliers, participate in programs that seek to limit the spread of seawater intrusion into the groundwater basins through the recycling of wastewater. Specifically, the City shall support the expansion of the use of recycled water for urban and agricultural irrigation and cooperate with these agencies to establish standards and regulations for the use of recycled water in development projects.
>
> **Mitigation Measure PSU5.** Requires developers and the City to install essentially leak-free sewer piping in new developments and in City collection system projects that will prevent inflow/infiltration (I/I) from entering the system. City shall also conduct smoke testing, inspection, and improvements to the existing sanitary sewer system to help prevent I/I.

Utility Master Plans

The City of Salinas maintains a variety of Master Plan documents that guide the design, development, and maintenance of the utilities within the city limits. These include the *Sewer System Management Plan* (2014), *City of Salinas Sanitary Sewer System Master Plan* (2011), *City of Salinas 2010 Municipal Service and Sphere of Influence Review, City of Salinas Stormwater Management Plan* (2012), the *California Water Service Company 2010 Urban Water Management Plan for the Salinas District* (2011), and the *2015 Urban Water Management Plan for the Salinas District* (2016).

THRESHOLDS OF SIGNIFICANCE - WASTEWATER

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment associated with Utilities if it will:

1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

2. Require or result in the construction of new wastewater treatment and/or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

3. Result in a determination by the wastewater treatment and/or collection provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

IMPACTS AND MITIGATION MEASURES

Impact 3.11-1: The proposed project has the potential to exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board (Less than Significant)

WASTE DISCHARGE REQUIREMENTS (WDRS) ORDER NO. R3-2014-0013

Wastewater generated within the Plan Area would be conveyed by the City of Salinas wastewater conveyance system to the MRWPCA Regional Treatment Plant. The MRWPCA, a regional agency, owns and operates the MRWPCA Treatment Plant. The wastewater treatment system treats domestic wastewater from residential and commercial sources. Waste Discharge Requirements (WDRs) Order No. R3-2014-0013 provides waste discharge requirements for the MRWPCA Treatment Plant, and a supply capacity of up to 29.6 MGD.

The Waste Discharge Requirements (WDRs) Order No. R3-2014-0013 includes: Discharge Prohibitions, Discharge Specifications, Effluent Limitations, Land Discharge Specifications, Reclamation Specifications, Surface Water Limitations, and Groundwater Limitations. This Order was adopted on May 22, 2014. The MRWPCA Treatment Plant is currently in compliance with the WDR requirements of Order No. R3-2014-0013, NPDES No. CA0048551. Implementation of WASP would be covered under the existing capacity and would not exceed the wastewater discharge requirements in this Order.

Implementation of WASP would have a ***less than significant*** impact relative to this topic.

Impact 3.11-2: The proposed project has the potential to result in a determination by the wastewater treatment and/or collection provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments (Less than Significant with Mitigation)

Project Wastewater Generation

The City of Salinas Sanitary Sewer Master Plan projects new development would increase the total wastewater discharge to an average dry weather flow to a maximum of approximately 22.1 at full build-out of the entire City Sphere of Influence. The estimated wastewater discharge for full buildout of the proposed project would be approximately 1.0 MGD.

Collection System

The WASP would require wastewater collection and treatment services. The existing wastewater collection system is owned and operated by the City of Salinas. The City maintains approximately 270 miles of sanitary sewer collection system pipeline and 11 Sanitary Sewer Lift Stations. Flow in the City system is primarily by gravity, with low-head pump stations located at low spots due to the City's flat topography.

Sanitary wastewater produced in the City is conveyed through the City's conveyance facilities to the former City treatment plant site, known as "TP1". The plant closed when the MRWPCA Treatment Plant began service. From that location it is pumped via the MRWPCA's Salinas Pump Station and Salinas Interceptor pipeline to the MRWPCA Treatment Plant in Marina. The primary components of the City's collection system include five trunk lines, 14 pump stations, and a system of smaller collection facilities that convey wastewater from individual homes, businesses, and other developed uses to the trunk lines and pump stations.

The sewer collection system for the Plan Area will be connected to the existing 24-inch sewer trunk line on McKinnon Street at the intersection with East Boronda Road. However, the elevation at the connection point on McKinnon Street and the lowest point of the northwest area of the Plan Area are very similar, making it difficult to connect the proposed gravity flow sewer collection system for the northwest area to the existing 24-inch sewer system on McKinnon Street. Therefore, the proposed sewer collection system for the northwest area of the Plan Area may need to be connected to the existing 10-inch sewer system on Van Buren Avenue near San Juan Grade Road. The proposed sewer collection system for the remainder of the Plan Area would connect to the aforementioned existing 24-inch sewer trunk line on McKinnon Street. See Figure 3.11-1 for a map of the preliminary WASP sanitary sewer system plan.

The City would maintain the sewer collection system once constructed. All the proposed sanitary sewer collection system would convey flow to the City's existing sewers by gravity without the need of any sewer pump station.

Treatment System

The MRWPCA Regional Treatment Plant provides regional wastewater treatment, disposal, and reclamation facilities for the cities of Monterey, Pacific Grove, Del Rey Oaks, Sand City, Marina, and Salinas; the Seaside County Sanitation District; the Castroville, Moss Landing and Boronda Community Services Districts; and Fort Ord.

All sanitary wastewater collected by the City's system flows to the MRWPCA's Salinas Pump Station, located at the southwestern boundary of the City. MRWPCA's Salinas Pump Station conveys sanitary wastewater discharges to the regional treatment facility via a MRWPCA force main.

The Regional Treatment Plant owned and operated by the MRWPCA would serve the proposed project. The Waste Discharge Requirements (WDRs) Order No. R3-2014-0013 allows the MRWPCA Regional Treatment Plant to accept up to 29.6 million gallons per day (MGD).

Conclusion

The WASP would increase the amount of wastewater requiring treatment. The wastewater would be treated at the MRWPCA Treatment Plant. The Waste Discharge Requirements (WDRs) Order No. R3-2014-0013 allows the MRWPCA Regional Treatment Plant to accept up to 29.6 million gallons per day. Given a current demand of approximately 16 MGD, the MRWPCA Treatment Plant currently has an additional capacity of approximately 13.6 MGD. The 1.0 MGD expected to be generated by full buildout of the proposed project would leave approximately 12.6 MGD for other projects.

The difference between the available demand and supply at the Treatment Plant, and confirmation with the MRWPCA that adequate wastewater treatment capacity is available prior to occupancy of any building, would ensure that there would not be a determination by the wastewater treatment and/or collection provider that there is inadequate capacity to serve the WASP's projected demand in addition to the provider's existing commitments. Implementation of Mitigation Measure 3.11-1 would ensure that this potential impact is ***less than significant***.

MITIGATION MEASURE

Mitigation Measure 3.11-1: *Prior to occupancy of the any building that would require wastewater treatment services, the project proponent shall secure adequate wastewater treatment capacity. The project proponent shall provide the City with documentation of a will-serve or other commitment from the agency providing wastewater treatment. Additionally, the project proponent would be required to install/connect the necessary collection/transmission infrastructure to ensure the appropriate treatment of all wastewater.*

Impact 3.11-3: The proposed project has the potential to require or result in the construction of new wastewater treatment or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects (Less than Significant)

The WASP project does not trigger a need to expand the wastewater treatment plant.

The WASP waste water collection system will be connected to the existing 24-inch sewer trunk line on McKinnon Street at the intersection with East Boronda Road. The proposed sewer collection system for the northwest area of the Plan Area may need to be connected to the existing 10-inch sewer system on Van Buren Avenue near San Juan Grade Road. The proposed sewer collection system for the remainder of the Plan Area would connect to the aforementioned existing 24-inch sewer trunk line on McKinnon Street. There would be a network of sewer collection infrastructure installed throughout the Plan Area to serve the WASP.

The potential for environmental impacts associated with the installation of the wastewater collection system, and all construction activities within the Plan Area, are addressed throughout this EIR. In some cases, the direct and indirect impacts are potentially significant and warrant mitigation measures, while in other cases there are significant and unavoidable impacts. The installation of the wastewater collection system for the WASP project does not cause any impacts above what is already analyzed and disclosed for each environmental topic in this EIR. This is a ***less than significant*** impact relative to this environmental question.

Impact 3.11-4: Cumulative impact on wastewater utilities (Less than Significant and Less than Cumulatively Considerable)

The cumulative setting for utilities includes the city of Salinas, the growth projections included in the City of Salinas General Plan, the General Plan Final EIR, and the most recent City of Salinas Economic Development Element. Under the combined General Plan/General Plan EIR and Economic

Development Element buildout conditions, the City of Salinas would see an increased demand for wastewater and sewer services.

The proposed project would not exceed the RWQCB wastewater treatment requirements or cause a significant impact related to the construction of new wastewater treatment or collection facilities or expansion of existing facilities. There is sufficient capacity at the Regional Treatment Plant to serve the proposed project.

The City requires each project applicant to secure adequate wastewater treatment capacity. The project proponent is required to provide the City with documentation of a will-serve or other commitment from the agency providing wastewater treatment. Additionally, the project proponent would be required to install/connect the necessary collection/transmission infrastructure to ensure the appropriate treatment of all wastewater.

The City of Salinas projects an increase of total wastewater discharge to a maximum of approximately 22.1 MGD at full buildout of the entire General Plan Sphere of Influence (SOI). Wastewater demand for the buildout of the most recent version of the Economic Development Element would add approximately 1.6 MGD to this total, which would increase the total cumulative demand at the Regional Treatment Plant to approximately 23.7 MGD. The wastewater capacity at the Regional Treatment Plant is 29.6 MGD, which provides 6.2 MGD in excess capacity. Therefore, the proposed project, in combination with buildout of the city's Sphere of Influence and the city's Economic Development Element, would generate *a* ***less than significant*** and ***less than cumulatively considerable*** impact on wastewater utilities.

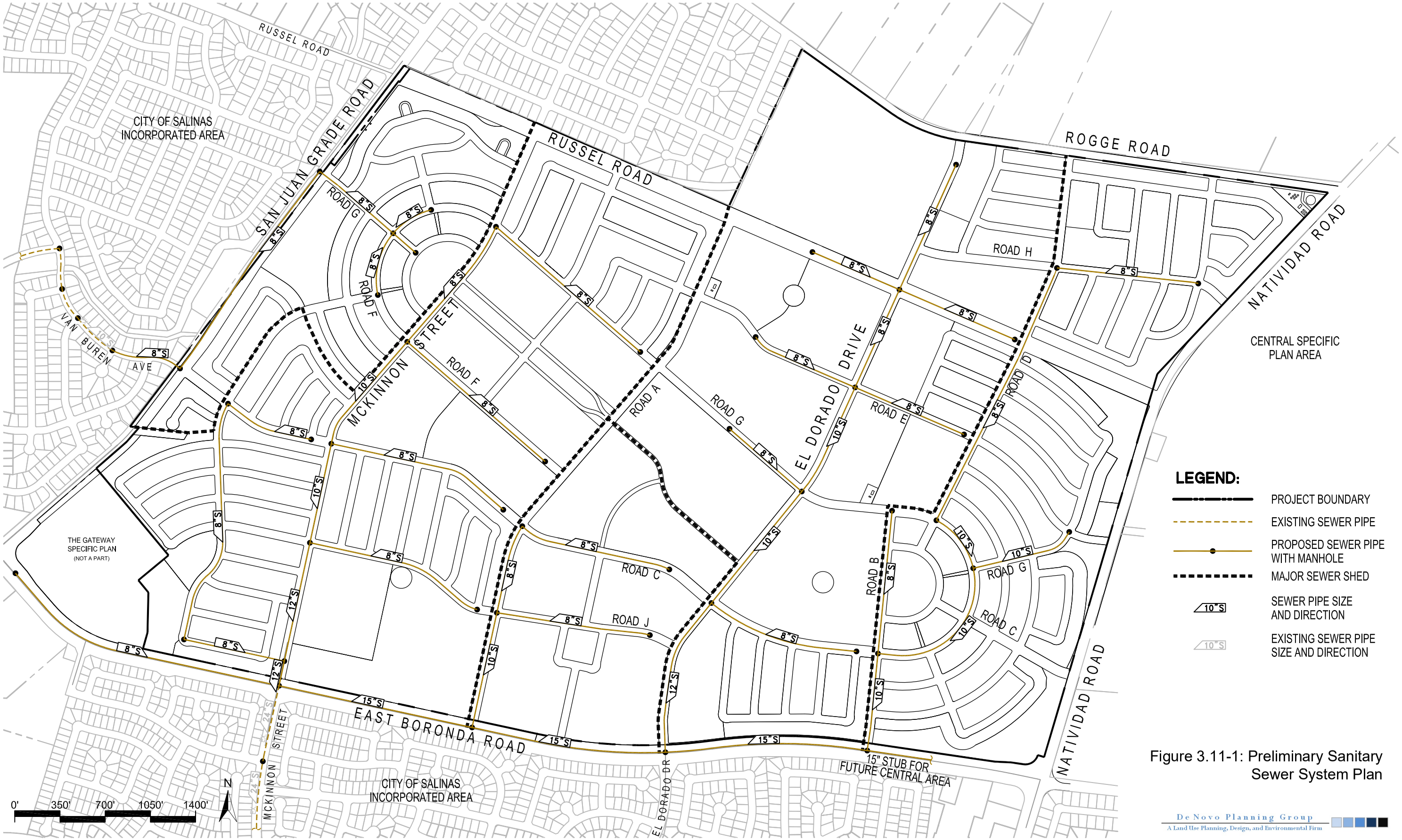


Figure 3.11-1: Preliminary Sanitary Sewer System Plan

Source: AECOM, Wood Rodgers, City of Salinas Figure 14 Preliminary Sanitary Sewer System Plan

This page left intentionally blank.

3.11.2 WATER SUPPLIES
EXISTING SETTING

Water Purveyor

The Plan Area was annexed and incorporated into the City of Salinas on September 8, 2008. The Salinas District of California Water Service (Cal Water Salinas District) provides potable water service to most of the City of Salinas. Cal Water Salinas District has an application pending with the California Public Utilities Commission (CPUC) to provide water service to the WASP and anticipates approval prior to construction of homes.

Water Service Area

The Cal Water Salinas District water service area includes most of the City of Salinas, excluding a large portion of the northeastern portion of the City, which is serviced by ALCO Water Company (ALCO). The Cal Water Salinas District serves residents and businesses of the City of Salinas and those of the unincorporated communities of Bolsa Knolls, Las Lomas, Oak Hills, Country Meadows, Salinas Hills, Buena Vista and Indian Springs.

A single distribution system provides service to the City of Salinas and Bolsa Knolls. Smaller hydraulically isolated distribution systems provide service to the other communities. Approximately 81% of all City of Salinas of all customers are provided water by the Cal Water Salinas District. The water supply for the customers of the Cal Water Salinas District is completely reliant on groundwater wells as the sole water source.

A project-specific Water Supply Assessment (WSA) has been prepared to evaluate the City's current and future water demands (including those of the Plan Area) against water supplies to ensure that adequate water is, or will be, available to accommodate the WASP. In a September 2015 letter to Cal Water, the City of Salinas requested that Cal Water (as the designated water service provider for the WASP) prepare the WSA. This WSA was prepared in December 2015 (see *West Area Specific Plan Salinas California SB610 Water Supply Assessment*). This report feeds into the update to the Cal Water Salinas District Urban Water Management Plan (UWMP), in its 2015 Update. The studies conclude that with the available groundwater, adequate water supplies are available to serve the WASP.

Historical and Future Water Demand

The following information was provided by the *West Area Specific Plan Salinas California SB610 Water Supply Assessment* (Cal Water, 2015).

PROPOSED PROJECT WATER DEMAND

Cal Water has developed water use data by user class to estimate water demand for various proposed developments. However, due to implementation of more aggressive water conservation practices and requirements, historic water use factors are higher than projected water use factors for new developments in 2015 and beyond. Accordingly, the method used is to estimate water demand of new developments based on newer water conservation requirements for toilets,

showers, dishwashers, washing machines, and changes in outdoor landscaping and irrigation systems and rates by applying a conservation factor to historic water use rates. All new buildings and irrigated areas systems in the WASP are to comply with current City of Salinas Codes, the City's General Plan EIR Mitigation Monitoring and Reporting Program for the WASP, and the California Plumbing and California Green Building Codes, which mandate installation of water conservation plumbing fixtures and fittings. Existing water use in the Salinas District is based on higher historic water use rate data (gpd/ft^2).

Single Family and Multi Family Residential

Based on U.S. Bureau of Census data for 2010, Cal Water determined that the average number of persons per dwelling unit in the Salinas District was 3.156. It is noted that the Salinas District has a lower average number of persons per household than the City of Salinas as a whole, which is 3.66. The average water use in the Salinas District for residential only (single and multi-family dwelling units combined) for 2012 and 2013 was 74 gallons per capita per day (gpcd). Average per capita water use in 2014 dropped to 66 gpcd, reflecting increased conservation by Salinas District residents due to the fourth year of a statewide drought. Estimated residential water demand at proposed project buildout is expected to be 940,333 gpd or 1,054.1 Acre-feet/year (AFY).

Retail

Of the total 480,000 square feet of retail activities proposed in the WASP, it is assumed that about 50% will consist of dry goods shops, 25% office, and 25% restaurants and food markets. This results in an estimated average water use rate of 0.3425 gpd/square foot. For retail activities, a conservative 25% water conservation savings is used for the Plan Area. Estimated retail demand would be 123,300 gpd or 138.2 AFY.

Schools

For the proposed five schools, a representative water use factor was developed by using actual McKinnon Elementary School water use data. The school covers 10.98 acres. For a 3-year period (2011 through 2013), the average annual water use factor was 1,084 gallons/day/acre. In 2014, in the 4th year of statewide drought, the water use factor decreased to 892 gallons/day/acre or a 17.7% reduction. The four new schools are expected to implement water savings fixtures and irrigation practices; therefore, an average of these two rates, or 988 gallons/day/acre is used here. Estimated annual average daily school water demand would be 89,641 gallons/day or 100.5 AFY.

Parks

Total park area is 49.76 acres. The City estimates 80% of the area will be drought tolerant turf and 10% drought tolerant plants. The remaining 10% will not be landscaped. Therefore, approximately 44.8 acres will be irrigated. Typical irrigation rates for parks are 2.0 to 2.5 AFY/acre. Using an average of 2.25 AFY/acre and assuming a 20% reduction in irrigation rate in the WASP parks results in a rate of 1.8 AFY/acre. Using this rate yields an annual demand of 80.6 AFY.

Overall Future Demand

Total Estimated Average Annual Daily Water Demand for the WASP at build out: 1,054.1 + 132.8 + 100.5 + 80.6 = 1,368 AFY or 1,220,256 gallons/day. The estimated maximum day flow is approximately 1.5 times the average annual daily demand (Cal Water, 2015).

Therefore, estimated maximum day demand for the WASP equals approximately:

1.5 x 1,220,256 gallons/day = 1,830,384 gallons/day or 1,271 gallons/minute

California Water Code Section 10631, Paragraph (e) (2), requires a water use projection (average annual demand forecast) in five-year increments for a 20-year period. It is assumed that the time required for approval of the WASP and certification of the EIR is one year (2018 - 2019) and that preparation of developer subdivision plans and tentative maps will occur concurrently. It is assumed that City approval of the latter will require a half a year and will occur in the 3rd and 4th quarters of 2018 and that construction of WASP infrastructure and residential dwelling units will start in the first quarter of 2019. If it takes approximately 20 months for infrastructure to be completed and the first phase of homes and other facilities to be built, sold and initially occupied, then water demands will start in the latter part of 2019 or 2020. The City estimates buildout will occur by 2035.

Therefore, the water demand forecast for the WASP in five-year increments is estimated to be as described in Table 3.11-6.

TABLE 3.11-6: SALINAS WASP AVERAGE ANNUAL WATER DEMAND (AFY)

YEAR	*WASP ANNUAL AVERAGE WATER DEMAND (AFY)*
2018/2019*	0
2020	342
2025	684
2030	1,026
2035	1,368

**REPRESENTS FIRST YEAR OF CONSTRUCTION. SOURCE: CAL WATER, 2015 (PG. 7)*

Existing Water Demand in the Plan Area

An estimated 90% of the land in the Plan Area or 720 acres is presently used to grow irrigated crops – lettuce and various vegetables (strawberries, broccoli, cauliflower, and alfalfa). Between two and three crops are grown annually. General cropping practice is to rotate crops. While as many as three crops can be produced in a year, normal practice is to grow two crops. Irrigation is by sprinkler or drip systems, which are supplied by groundwater pumped from agricultural wells in the area.

Groundwater recharge from irrigated agricultural land is a function of many variables including weather, hydrologic conditions, irrigation practices, crops, soil types, soil conditions, etc. One approach to determining recharge is to collect data and make estimates of monthly irrigation, monthly precipitation, runoff, plant evapotranspiration, evaporation, initial soil moisture and the soil's available water holding capacity. (Recharge is the net of irrigation and precipitation minus water losses associated with other factors).

Since this data is not available and not obtainable, a general estimate of recharge to the groundwater is provided here.

- Strawberries: 1.9 ft./acre/crop
- Broccoli, cauliflower, alfalfa: 4.04 ft./acre/crop

As previously mentioned, general farming practice is to rotate crops. If strawberries, broccoli and cauliflower are the crops being cultivated over the course of 1 year, with ½ of the required irrigation water for strawberries and the other ½ for broccoli and cauliflower or alfalfa, the overall average irrigation rate for existing irrigated acres in the Plan Area is estimated at:

0.5 (1.9) + 0.5(4.04) = 2.97 or 3.0 acre-feet/acre/year or 3.0 ft./year

Estimated groundwater pumping for existing irrigated agricultural use in the Plan Area is:

2 x 3.0 ft./year x 720 acres = 4,320 AFY

The estimated 4,320 AFY ground water pumping for existing agricultural use in the WASP is 2,952 AFY more than the total build out estimated demand for the WASP, which is 1,368 AFY. Therefore, the total build out estimated water demand for the WASP is projected to use less water than required for current irrigated agricultural uses.

The estimated amount of recharge from existing irrigated agriculture use is:

0.3 x 4,320 AFY = 1,296 AFY

Estimated net consumptive water use by existing irrigated agriculture use in the Plan Area is 3,024 AFY.

Cal Water data for the period from 2010 through 2013 (4 years) shows that the average indoor water use in single family homes was 67% of total water use. It was 88% for 2014 due to the 4th year of drought and increased water conservation by Salinas District residents. For multi-family dwelling units for 2010 – 2013, average indoor use was 78% of total use. It was 87% for 2014 for the reasons cited. For the WASP, 26.5% of the dwelling units will be multi-family. The estimated average indoor water use of the WASP is: 0.265 x 78% + 0.735 x 67% = ~ 70%.

Assuming similar average percentages of indoor water use for the other use categories results in a total estimated outdoor annual water demand for the Plan Area at build-out of 0.30 x 1,368 = 410 AFY.

If 20% of outdoor use infiltrates below the plant root zone and recharges groundwater, then 0.20 x 410 = 82 AFY or 6% of estimated average annual demand is estimated to recharge to the groundwater system.

The estimated amount of indoor water use that will become sanitary wastewater is 0.70 x 1,368 = 958 AFY.

Sanitary wastewater is conveyed to the Monterey Regional Water Pollution Control Agency (MRWPCA) for tertiary treatment in compliance with California State Title 22 requirements.

Approximately, 60% of treated effluent is used for agricultural crop irrigation through the Castroville Seawater Intrusion Project/purple pipe program.

The city of Salinas contributes approximately 60% of wastewater flows to the Regional Treatment Plant. Therefore, wastewater from the City of Salinas supplies approximately 36% of treated water used for crop irrigation (0.6 x 0.6 = 0.36). Treated sanitary wastewater (recycled water) from the Plan Area that will be used for agricultural irrigation is: 0.36 x 958 = 345 AFY. This recycled water is groundwater not pumped for agricultural irrigation assuming irrigators use a set amount of water annually for irrigation.

Net Project Water Demand

On the basis of this analysis, the estimated total amount of WASP consumptive water use at build out would be 1,368 - 82 - 345 = 941 AFY.

The estimated total amount of water consumptively used in the Plan Area for irrigating crops is 3,024 AFY.

Therefore, conversion of the Plan Area from agricultural to urban land use could result in an estimated reduction of consumptive groundwater use (or increase in groundwater storage) of: 3,024 - 941 = 2,083 AFY. This is a significant contribution in reducing overdraft in the Salinas Valley Ground Water basin.

CAL WATER SALINAS DISTRICT – WATER CONSERVATION

Cal Water has expanded its water conservation programs and developed new ones for the Salinas District as a result of state law and policies requiring further reductions in per capita daily water use. SBx7-7 mandates a 20 percent reduction in per capita urban water use by year 2020. The CPUC requires implementation of conservation programs and rate structures to achieve reductions in per capita water use. The Memorandum of Understanding Regarding Urban Water Conservation in California (MOU), of which Cal Water has been a signatory since 1991, requires implementation of conservation programs. The Salinas District Water Conservation Master Plan, which addresses these requirements, is included as Appendix L in the Cal Water Salinas District 2015 UWMP.

The 2015 and 2020 district-specific targets for Salinas District are 131 and 116 gpcd, respectively. For the five years between 2010 and 2014, average annual daily per capita water use has varied as described in Table 3.11-7, below.

TABLE 3.11-7: CAL WATER SALINAS DISTRICT AVERAGE ANNUAL DAILY PER CAPITA WATER USE

YEAR	*WASP ANNUAL AVERAGE WATER DEMAND (GPCD)*
2010	129
2011	137
2012	141
2013	142
2014	129

SOURCE: CAL WATER, 2015(PG. 7)

The five-year average for the period 2010-2014 is 135.6 gpcd – 3.5% over the target value for 2015. According to the California SWRCB, water use in the Cal Water Salinas District decreased in 2015 as compared with 2014, thereby allowing the Salinas District to meet the SBx7-7 2015 target (SWRCB, 2017). Moreover, according to the Public Draft of the City of Salinas 2015 UWMP, per capita water demand in 2015 was 106 gpcd, well below the SBx7-7 2015 target of 131 gpcd. Per capita water use needs to be 116 gpcd or below by 2020 to meet the 2020 target.

Water Supplies

The Salinas District water supply comes from pumped groundwater within District boundaries. It is extracted from aquifer segments of the Salinas Valley groundwater basin known as the Pressure Area and Eastside Area. The Salinas Valley groundwater basin, which is overdrafted, is unadjudicated. The California Water Resources Control Board (CWRCB) has initiated adjudication proceedings in the event that Monterrey County Water Resources Agency (MCWRA) is not able to effectively reduce the overdraft.

The Pressure Area is a region of gradually declining groundwater elevations and is characterized by three confined aquifer systems, overlain and separated by thick clay layers that act as aquicludes. These aquifers named for their relative depths are known as the “180 Foot", the “400 Foot”, and “900 Foot” aquifers. Cal Water pumps from all three aquifers.

The groundwater level in the Eastside Area is declining more rapidly than any other area in the Salinas Valley groundwater basin. The Eastside Area is comprised of unconfined, randomly scattered water bearing strata.

Since the surface elevation in the Salinas District ranges from 40 to 70 feet above sea level, the three aquifers of the Pressure Area are all below sea level. There is hydrologic continuity with the ocean and the three aquifers.

MCWRA has estimated that the annual non-drought overdraft of the Salinas Basin is about 45,300 AFY. Because of the hydrologic continuity between the ocean and the aquifers of the Pressure Area, seawater has been intruding into these aquifers at an estimated rate of 28,800 AF per year.

Groundwater pumping throughout the Salinas Valley has contributed to the overdraft of the groundwater basin. MCWRA numbers indicate that water levels have declined in all four of the basin’s areas. However, the minor declines in the Upper Valley and Forebay areas appear to be in response to drought conditions. Recharge in these areas from releases from the San Antonio and Nacimiento Reservoirs have historically stabilized groundwater levels in these two areas. Declines since 1987 are believed to be the result of reduced recharge supplies.

Seawater has advanced into the 180 Foot aquifer to within one mile of Cal Water’s closest well. When possible, Cal Water shifts groundwater pumping from the 180 Foot and Eastside aquifers to wells further south and in the 400 Foot aquifer of the Pressure Area.

Except for an annual variance of approximately 35 feet, average static groundwater levels in District wells since 1961 changes elevation during drought years. In 1976 and 1977, the running average

level declined by 20 feet. Recovery occurred in 1982 and 1983 when storm runoff refilled local reservoirs increasing groundwater recharge. With extended drought conditions commencing in 1984, the running average elevation again began declining and by the summer of 1992 had dropped by 35 feet. Despite four years of drought between 2011 and 2015, average static groundwater levels have remained relatively constant.

A total of 28 wells supply the City of Salinas service area. (Note: The City of Salinas service area is the largest service area in the Salinas District and is hydraulically separate from other service areas). The design capacity of active operational wells is 27,880 gpm or 40 MGD or 44,843 AFY of water. In addition, Cal Water has three new wells being constructed and scheduled to become operational in 2017 and 2018. Well capacities range from 500 gallons per minute (gpm) to 2,000 gpm. It is assumed that the three new wells will have an average design capacity of 1,200 gpm for a total of 3,600 gpm or 5.18 MGD, which is equivalent to 5,812 AFY. In addition, the WASP provides for three new wells to be constructed as development progresses. The plan is to have the first well operational at the time initial development occurs. The assumption for the design capacity of the three new Plan Area wells is 1,200 gpm each. So the first WASP well that would be online would add 1,200 gpm capacity or 1,937 AFY. Thus, when the first well is completed, the total design capacity of wells serving the City of Salinas including the Plan Area would be: 44,843 + 5,812 + 1,937 = 52,592 AFY.

The estimated 2015 average annual demand for the Salinas District as a whole was 15.9 MGD or 17,862 AFY (40% of design capacity). The Plan Area distribution system will be interconnected with the existing City of Salinas system so that water can be supplied from wells within the Plan Area and if needed during peak periods of demand from nearby wells within the existing service area.

When initial development and occupancy in the Plan Area has occurred, the estimated total design capacity of the City of Salinas well system including one new well in the Plan Area is: 27,780 + 3,600 + 1,200 = 32,580 gpm or 46.9 MGD. Maximum day demand is estimated to be 1.5 times the average day demand. At that time maximum day demand is estimated to be 22.47 MGD or 48% of well design capacity. With the addition of two more wells in the Plan Area in the period from year 2020 to year 2030 with a combined capacity of 2,400 gpm, the total City of Salinas plus WASP well design capacity would be 34,980 gpm or 50.37 MGD. The projected demand for year 2040 is 21,716 AFY or 19.4 MGD, which is 38.5% of design capacity. The estimated maximum day demand in year 2040 is 29.1 MGD. It is noted that a surplus of capacity is required for several reasons: maintenance requirements on older wells, break downs on wells requiring repairs that can take up to 6 months, changes in water quality such as nitrates, MTBE, uranium, iron and manganese, etc. that require a well to be taken out of operation until either a treatment system can be designed and constructed or a determination is made to retire it.

Cal Water has made and continues to make improvements to its distribution system by adding or upgrading its transmission pipelines, storage facilities and booster pump stations so that it is able to move water from wells that are operational to areas where demand may require water from supply sources outside a particular area in the event one or more wells are not operational. This provides supply assurance as well as operational flexibility.

Table 3.11-8 provides the groundwater pumping estimates for the City of Salinas between 2015 and 2040.

TABLE 3.11-8: GROUNDWATER PUMPING – CITY OF SALINAS AFY

SOURCE	*2015*	*2020*	*2025*	*2030*	*2035*	*2040*
Salinas Valley Groundwater Basin	14,659	16,651	17,531	18,459	19,439	20,474

SOURCE: CAL WATER, 2016 (PG. 57); CAL WATER, 2015 (PG. 7)

Dry Year Water Supply Availability and Reliability

The following information was provided by the *West Area Specific Plan Salinas California SB610 Water Supply Assessment* (Cal Water, 2015).

SB 610 requires an assessment as to whether the proposed water supply for the Salinas District including the WASP service area will meet projected water demand for the next 20 years during 1) a normal dry year, 2) a single dry year, and 3) multiple dry water years.

Average annual rainfall for the Salinas District is 14.6 inches. One of the driest years occurred in 1999 when the rainfall was 79.5% of average (11.6 inches). This is taken as the single dry year. The three multiple dry-water years used in the 2010 UWMP were based on the consecutive lowest annual rainfall totals which occurred in 2002, 2003, and 2004. Reduced rainfall in Salinas during this period coincides with similar reductions experienced elsewhere in California.

For single dry years (1999) and multiple dry years (2002, 2003, and 2004) there are changes in average water use with respect to what might be considered a "normal" hydrologic year. For example, the average water use for the two years with above normal rainfall (2000 and 2001), was 655 gpd/service. For the three dry years (2002, 2003 and 2004), average use was 702 gpd/service or an average of 7.1% increase in water use.

While multiple dry years would result in a decline in ground water levels, the effect historically has not reduced the capacity of Cal Water's wells to meet service area demands. Ground water, as previously shown has recovered in wet years resulting in a relatively stable groundwater supply over decades.

Table 3.11-9 presents the current and projected supply capacity versus demand for a normal year, a single dry year, and multiple dry hydrological years.

TABLE 3.11-9: SUPPLY CAPACITY VERSUS DEMAND FOR NORMAL, SINGLE DRY YEAR, AND MULTIPLE DRY YEAR

YEAR	*NORMAL YEAR, AFY*			*SINGLE-DRY YEAR DROUGHT, AFY*			*MULTI-DRY YEAR DROUGHT[B], AFY*		
	SUPPLY	*DEMAND*	*DIFF.[A]*	*SUPPLY*	*DEMAND*	*DIFF.[A]*	*SUPPLY*	*DEMAND*	*DIFF.[B]*
2015	44,843	17,862	26,981	44,843	17,862	26,981	40,359	19,112	21,247
2020	52,592	16,651	35,941	52,592	16,651	35,941	47,333	17,817	29,516
2025	52,592	17,531	35,061	52,592	17,531	35,061	47,333	18,758	28,575
2030	52,592	18,459	34,133	52,592	18,439	34,133	47,333	19,751	27,582
2035	52,592	19,439	33,153	52,592	19,439	33,153	47,333	20,800	26,533

NOTE: (A) DIFFERENCE BETWEEN SUPPLY AND DEMAND. (B) 3RD DRY YEAR.
SOURCE CAL WATER, 2015 (PGS. 36-37)

Single Dry Year

Based on preceding data and analysis, Cal Water estimates that the availability of its groundwater supplies will not be affected by a single dry year. As the data shows, single dry year demand will very likely be the same as a normal hydrologic year demand. While some customers may increase landscape irrigation due to reduced precipitation, others based on conservation program information from Cal Water will reduce consumption.

Multiple Dry Years

Based on preceding data and analysis, Cal Water estimates that the availability of its groundwater supplies will not be significantly affected by a multiple dry year drought. The effect of pumping groundwater supplies that underlie the Salinas District at "normal" demand levels during multiple dry years is likely that some localized area sees a decline in groundwater levels. As groundwater level data have shown, during ensuing wet periods, groundwater levels usually recover to normal levels, provided overall (City of Salinas) area pumping rates remain the same or do not significantly increase.

Governor Brown issued an executive order on April 1, 2015 mandating urban water users achieve a 25% reduction in demand over at least the next year. A report in August 2015 by the CA Dept. of Water Resources indicated that the state wide average of water conservation savings by urban water utilities was over 35%.

Salinas District demand in year 2035 during a multiple dry year period might be expected to decrease by 15% of the 2035 normal demand or be equal to 0.85 x 19,439 = 16,523 AFY.

Nonetheless, it is conservatively assumed here that in the 3rd year of a multiple dry year period, demand will increase by 7% - not withstanding intensified water conservation efforts by Cal Water, MCWRA and other agencies. It is also conservatively assumed that a temporary decline in static groundwater levels will reduce overall yield of Cal Water's wells by 10%. Table 3.11-10 compares supply versus demand under these assumptions.

TABLE 3.11-10: 3RD DRY YEAR: SUPPLY CAPACITY VERSUS DEMAND (AFY)

YEAR	SUPPLY	DEMAND	DIFFERENCE
2015	40,359	19,112	21,247
2020	47,333	17,817	29,516
2025	47,333	18,758	28,575
2030	47,333	19,751	27,582
2035	47,333	20,800	26,533

SOURCE: CAL WATER, 2010 (PG. 37)

Even with no change in the estimated design supply capacity in 2035 (not including the two additional wells with an estimated additional capacity of 3,874 AFY to be constructed in the WASP service area by 2030), projected demand is only 43.9% of the design capacity supply in the 3rd year of a multi-year dry period (Cal Water, 2015).

It should also be noted that the Public Draft of the City of Salinas 2015 UWMP also describes that there would be sufficient supply to accommodate demand within the City for normal, single dry, and multiple dry year conditions (Cal Water, 2016).

REGULATORY SETTING – WATER SUPPLIES

Senate Bill (SB) 610

Senate Bill (SB) 610 was adopted in 2001 and reflects the growing awareness of the need to incorporate water supply and demand analysis at the earliest possible stage in the land use planning process. SB 610 amended the statutes of the Urban Water Management Planning Act, as well as the California Water Code Section 10910 et seq. The foundation document for compliance with SB 610 is the Urban Water Management Plan (UWMP), which provides an important source of information for cities and counties as they update their general plans. Likewise, planning documents such as general plans and specific plans form the basis for the demand information contained in an UWMP, as well as a Water Supply Assessment (WSA) required under SB 610.

Water Code Section 10910 (c)(4) states "If the city or county is required to comply with this part pursuant to subdivision (b), the water assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses."

Water supply planning under SB 610 requires reviewing and identifying adequate available water supplies necessary to meet the demand generated by a project, as well as the cumulative demand for the general region over the next 20 years, under a broad range of water conditions. This information is typically found in the current UWMP for the project area. SB 610 requires the identification of the public water supplier for a project. The City of Salinas has been identified in the WSA as the public water supplier to the WASP.

In addition, SB 610 requires the preparation of a WSA if a project meets the definition of a "Project" under Water Code Section 10912 (a). The code defines a "Project" as meeting any of the following criteria:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A commercial building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- A hotel or motel with more than 500 rooms;
- A proposed industrial, manufacturing, or processing plant, or industrial park, planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;

- A mixed-use project that includes one or more of these elements; or
- A project creating the equivalent demand of 500 residential units.

Alternately, if a public water system has less than 5,000 service connections, the definition of a "Project" includes any proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of service connections for the public water system. The proposed project includes more than 650,000 square feet of floor area as part of a proposed industrial uses, and therefore, qualifies as a "Project" under Section 10912 (a) of the Water Code. Thus, the City has prepared a Water Supply Assessment (WSA) as required by these criteria under SB 610. The WSA is included in this EIR as Appendix G.

City of Salinas General Plan

The Salinas General Plan contains the following policies that are relevant to water supply for the proposed Project:

Land Use Element

Policy LU-6.2: Actively work with Cal Water and Alco, as well as regional water suppliers and distributors, to ensure that high quality water is available for the community.

Policy LU-6.2: Review development proposals to ensure that adequate water supplies, treatment, and distribution capacity is available to meet the needs of the development without negatively impacting the existing community.

Policy LU-6.3: Participate in and support regional programs and projects that target the improvement and conservation of the region's groundwater and surface water supply.

Policy LU-6.4: Actively promote water conservation by City residents, businesses and surrounding agricultural producers.

Policy LU-6.5: Review projects subject, such as residential projects with 500 or more units, for compliance with Sections 10910-10915 of the California Water Code.

Conservation/Open Space Element

Policy COS-1.1: Work with regional and local water providers to ensure that adequate supplies of water are available to meet existing and future demand.

Policy COS-1.2: Cooperate with local, regional, and state water agencies to develop new water sources.

Policy COS-1.3: Work with local and regional water providers to increase the production, distribution, and use of recycled water.

Policy COS-1.4: Maintain and restore natural watersheds to recharge the aquifers and ensure the viability of the ground water resources.

Policy COS-1.5: Cooperate with the Monterey County Water Resources Agency, the State Water Resources Control Board and the Regional Water Quality Control Board to implement programs that address the two primary causes of poor water quality in the planning area: salt water intrusion and nitrate contamination.

Policy COS-1.6: Enforce national (NPDES) requirements and participate in regional efforts to protect and enhance water quality.

Policy COS-2.1: Participate in and implement local and regional programs that promote water conservation.

Policy COS-2.2: Work with water providers to institute conservation programs to address water supply problems caused by groundwater overdrafting.

Policy COS-2.3: Apply standards that promote water conservation in agricultural, residential and non-residential uses.

Policy COS-2.4: Enforce the City's Water Conservation Ordinance.

Utility Master Plans

The City of Salinas maintains a variety of Master Plan documents that guide the design, development, and maintenance of the utilities within the city limits. These include the Sewer System Management Plan (2014), City of Salinas Sanitary Sewer System Master Plan (2011), City of Salinas 2010 Municipal Service and Sphere of Influence Review, City of Salinas Stormwater Management Plan (2012), the California Water Service Company 2010 Urban Water Management Plan for the Salinas District (2011), and the 2015 Urban Water Management Plan for the Salinas District (2016).

THRESHOLDS OF SIGNIFICANCE – WATER SUPPLY

Consistent with Appendix G of the CEQA Guidelines, the proposed project may have a significant impact on the environment associated with Utilities if it would:

1. Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
2. Have insufficient water supplies available to serve the project from existing entitlements and resources, or if new or expanded entitlements are needed.

IMPACTS AND MITIGATION MEASURES

Impact 3.11-5: The proposed project has the potential to require construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects (Less than Significant)

The provision of public services and the construction of onsite and offsite infrastructure improvements will be required to accommodate development proposed by the WASP. The WASP would require extension of offsite water infrastructure to the Plan Area for potable water. Offsite improvements include connection to the existing water piping at San Juan Grade Road, East Boronda Road, El Dorado Drive, and Mckinnon Street. All offsite water piping improvements will be in or adjacent to existing roadways, thereby limiting new environmental impacts.

New water pipes would be installed throughout the Plan Area. There would be three new groundwater wells that would be developed on-site, including well site #1 that would include the development of a centralized treatment plant ("Well #1 Centralized Treatment Plant"). See Figure 3.11-2 for the water distribution system plan for the WASP. All improvements will be developed according to City standards and specifications.

The proposed project proposes to construct three wells with a minimum capacity of 1.72 million gallons per day (MGD) each to meet a maximum day demand at full buildout of the proposed project with two wells in operation and one well in reserve as a backup. Well locations are chosen on the basis of water quality and potential production capabilities. According to Cal Water's Assessment Report, it is expected that the proposed wells within the Plan Area will have a high probability of meeting drinking water quality standards. As a hedge against possible future changes in water quality, Cal Water may make provisions for on-site treatment with the design of the wells for the WASP development.

The proposed on-site water distribution system would be looped to maintain water quality and would be sized for minimum system pressures of 20 pounds per square inch (psi) at maximum day demand plus fire flow. The fire flow requirement for the WASP is 1,500 gallons per minute (gpm) for a minimum of two hours. Under peak day demand, the system would deliver the required flows with a minimum of 40 pounds per square inch (psi) residual pressure. The Plan Area would be served by 12-inch diameter and 16-inch diameter main trunk lines and 8-inch diameter distribution lines branching off the trunk lines and serving individual streets.

The water infrastructure is sized to meet the demand within the Plan Area. All offsite improvements are to be placed in or adjacent to existing streets to minimize potential impacts. Although the WASP would not require the expansion of existing water treatment facilities, the WASP may require the construction of a new centralized treatment facility within the Plan Area. This treatment facility would be specifically sized to serve the WASP and would not be upsized to ensure that it does not induce growth beyond what is anticipated by the WASP. Implementation of the WASP would have a ***less than significant*** impact relative to this topic.

Impact 3.11-6: The proposed project has the potential to have insufficient water supplies available to serve the project from existing entitlements and resources (Less than Significant)

Project Water Demand

The projected water demand is based on the calculations described in the Water Supply Assessment developed by Yarne & Associates for the California Water Service Salinas District (Cal Water Salinas District) (the "Water Supply Assessment" or "WSA").

The WSA completed for the WASP demonstrates that the City's existing and additional potable water supplies are sufficient to meet the City's existing and projected future potable water demands, including those future water demands associated with the WASP, to the year 2035 under all hydrologic conditions. As described in the WSA, the Cal Water Salinas District has sufficient groundwater supplies to provide for all of its service area customers for many years to come.

A comparison of Cal Water Salinas District's projected water supplies and demands is shown in Table 3.11-11 for Normal, Single Dry, and Multiple Dry Years. The supply-demand difference in Table 3.11-11 indicates that, in average precipitation years, in single dry years, and in multiple dry years, the District will have sufficient water to meet its customers' needs through 2035.

TABLE 3.11-11: SUPPLY CAPACITY VERSUS DEMAND FOR NORMAL, SINGLE DRY YEAR, AND MULTIPLE DRY YEARS[A]

YEAR	NORMAL YEAR, AFY			SINGLE-DRY YEAR DROUGHT, AFY			MULTI-DRY YEAR DROUGHT[B], AFY		
	SUPPLY	DEMAND	DIFF.[A]	SUPPLY	DEMAND	DIFF.[A]	SUPPLY	DEMAND	DIFF.[A]
2015	44,843	17,862	26,981	44,843	17,862	26,981	40,359	19,112	21,247
2020	52,592	16,651	35,941	52,592	16,651	35,941	47,333	17,817	29,516
2025	52,592	17,531	35,061	52,592	17,531	35,061	47,333	18,758	28,575
2030	52,592	18,459	34,133	52,592	18,439	34,133	47,333	19,751	27,582
2035	52,592	19,439	33,153	52,592	19,439	33,153	47,333	20,800	26,533

NOTE: (A) DIFFERENCE BETWEEN SUPPLY AND DEMAND. (B) 3RD DRY YEAR.
SOURCE CAL WATER 2015, PGS. 36-37

The WASP proposes to construct three wells with a minimum capacity of 1.72 million gallons per day (MGD) each to meet a maximum day demand at full plan development of 2,257.6 acre feet/year with two wells in operation and one well in reserve as a backup. Well locations are chosen on the basis of water quality and potential production capabilities. Table 3.11-12 below describes the maximum day demand for each of the projected uses, at full build-out. The three new groundwater wells would be sufficient to provide potable water to all uses within the proposed project.

TABLE 3.11-12: WATER DEMAND ESTIMATE (AFY)

USE	CALCULATION[1]	ACRE FEET PER YEAR
Retail/Services	571,500 s.f. @ 0.335 gal/s.f./day = 191,453 gpd	214.4
Residential	87.57 gal/resident @ 3.67 residents/unit = 321.4 gal/unit/day	1,562.3
Schools	90.95 acres @ 3,500 gal/acre/day = 318,325 gpd	356.5
Parks	49.76 acres @ 2,232 gal/acre/day = 111,064 gpd	124.4
TOTAL		**2,257.6**

[1] Final Supplement for the Salinas General Plan Program EIR, Appendix E, Water Supply Assessment – Cal Water

Conclusion

Water supplies are sufficient to meet the City's existing and projected future potable water demands, including those future water demands associated with the WASP, to the year 2035 under all hydrologic conditions. The three new groundwater wells would provide adequate groundwater for the proposed project. Additionally, the Cal Water Salinas District has sufficient water supply throughout its service area to serve the proposed project, even during the third year of a multi-year drought, and even if the proposed project's groundwater wells proved to not be sufficient to serve the entire Plan Area. Therefore, the WASP would result in a ***less than significant*** impact relative to this topic.

Impact 3.11-7: Cumulative Impact on Water Utilities (Less than Significant and Less than Cumulatively Considerable)

Under the combined General Plan/General Plan EIR and Economic Development Element buildout conditions, the City of Salinas would see an increased demand for water services. There are available water supplies to serve the proposed project from existing entitlements and resources. Additionally, the proposed project would not cause a significant impact related to the construction of the water system. Buildout of the General Plan and most recent City of Salinas Economic Development Element would add additional demand. Water demand for buildout of the entire City of Salinas Sphere of Influence (inclusive of the proposed project and all existing development within the City of Salinas) would be approximately 43,309.3 AFY. Additionally, water demand for buildout of the Economic Development Element would require an additional 1,972.3 AFY. Combined, the cumulative scenario would require a total of 45,281.6 AFY, which is within the available supply of 47,333 AFY expected by 2035 under multiple dry-year conditions.

TABLE 3.11-13: SALINAS BUILDOUT CONDITIONS WATER GENERATION ESTIMATE [1]

USE	*CALCULATION* [1]	*ACRE FEET PER*
GENERAL PLAN/GENERAL PLAN EIR BUILDOUT CONDITIONS		
Retail/Services	56,053,000 s.f. @ 0.335 gal/s.f./day[2] = 18,777,755 gpd[2]	21,033.6
Residential	87.57 gal/resident @ 3.67 residents/unit = 321.4 gal/unit/day	20,900.5
Schools	310.22 acres @ 3,500 gal/acre/day = 318,325 gpd	1,216.2
Parks	63.61 acres @ 2,232 gal/acre/day = 141,985 gpd	159.0
ECONOMIC DEVELOPMENT ELEMENT		
Retail/Services	5,255,959 s.f. @ 0.335 gal/s.f./day = 1,760,746 gpd	1,972.3
TOTAL		**45,281.6**

[1] Calculations in this table are derived from water demand estimates from the Final Supplement for the Salinas General Plan Program EIR, Appendix E, Water Supply Assessment – Cal Water.
[2] Gallons per day

There would be sufficient water resources available to provide supply for buildout of the cumulative scenario. Therefore, this would result in a ***less than significant*** and a ***less than cumulatively considerable*** impact on water utilities.

This page left intentionally blank.

Figure 3.11-2: Preliminary Water Distribution System Plan

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

Source: AECOM, Wood Rodgers, City of Salinas Figure 14 Preliminary Water Distribution System Plan

This page left intentionally blank.

3.11.3 STORM WATER

EXISTING SETTING

Existing Site Conditions

The existing site conditions are largely agricultural, with associated residences and farm yards. The ground surface is relatively uniformly sloped with crop tilling slowing and retaining overland flow. No paved roads cross the Plan Area; however, much of the Plan Area is bounded by dirt roadways associated with the farming.

Rainfall in the project area and contributing watershed is relatively uniform across the area. Average annual rainfall is calculated to be 15.5 to 16.1 inches, depending on the reporting agency (U.S. Climate data, 2016). Average rainfall depths have been estimated to be 2.4 to 2.5 inches for the 10-year, 24-hour event and 4.0 to 4.2 inches for the 100-year, 24-hour event (Balance Hydrologics, 2016). Monthly evapotranspiration in the project vicinity varied from 1.5 to 4.7 inches in 2015, with a total for that year of 38.0 inches (Balance Hydrologics, 2016).

No streams flow through the Plan Area. Runoff from the subdivisions to the west and northwest (across San Juan Grade Road and across Russels Road to the north) is diverted away from the Plan Area by existing storm drain lines which direct flow to Santa Rita Creek. Runoff from agricultural land (approximately 222 acres) to the northeast crosses Rogge Road and enters the Plan Area. The remainder of upslope runoff drains to Gabilan Creek to the east, which flows to Carr Lake. All runoff from the Plan Area is eventually conveyed to Monterey Bay via Zone 9 Reclamation Ditch and Tembladero Slough approximately ten miles northwest of the Plan Area. Constructed beginning in 1912, the Reclamation Ditch is the major drainage conveyance for the lower Salinas Valley north of the Salinas River itself and is owned and maintained by the Monterey County Water Resources Agency (MCWRA) (Balance Hydrologics, 2016).

Runoff from the eastern part of the Plan Area flows south to storm drain inlets along Boronda Road (42- and 48-inch diameter trunk storm drain line), then to Gabilan Creek Road (42- and 48-inch diameter trunk storm drain line), and then to Gabilan Creek approximately 2,000 feet east of Natividad Road. Gabilan Creek is a major tributary to Carr Lake, a regionally important drainage feature that represents the confluence point for Gabilan, Natividad, and Alisal Creeks northeast of U.S. 101. Carr Lake is one of the remnant lake features in the lower Salinas Valley, and the lake bed is currently in agricultural uses. The lake is drained by the Reclamation Ditch and has been the site of past flooding.

Existing City Facilities

The City's storm drainage system consists of approximately 74 miles of the larger storm drains from 24- to 84-inches in diameter, as well as some 18-inch drainage pipes. The City's system also contains many local storm drains that are 18-inches and smaller in diameter that were not modeled. Most of the existing pipes are reinforced concrete pipe or cast-in-place concrete.

The drainage system within each major watershed consists of a series of branches of pipes that drain to the receiving water. About 360 drainage subareas within the watersheds were defined that drain to the modeled storm drain pipes. The drainage system flows by gravity to all receiving waters, except for the Salinas River outfall.

The Salinas River Storm Drainage Pump Station and Blanco Detention Basin are located at the site of the former wastewater treatment plant at the southwest City boundary. A 66-inch corrugated metal outfall conveys flows to the Salinas River. During low flow conditions, gravity discharge can occur. When the flow increases, it is pumped to the river. The pump station has two pumps with a peak capacity of 110 cubic feet per second (cfs). If inflow exceeds the pump station capacity, it is stored temporarily in the Blanco Detention Basin, which has a capacity of 36 acre-feet (AF) with freeboard, and up to 50 AF when the freeboard is used and the basin is completely full.

There are three small lift stations to drain localized low spots at major underpasses. Two lift stations are owned and operated by the City: one at the Alisal Street underpass, and one at Front and Market Streets. The third lift station on North Main north of Market Street is owned by Caltrans and operated by the City.

Modeled detention basins, in addition to the Blanco Detention Basin, include:

The City of Salinas Stormwater Master Plan makes the following statements regarding the potential effects of urbanization in the Plan Area.

- Existing storm drains within Salinas are at maximum capacity and cannot accept increased peak flows without causing additional flooding.
- Certain reaches of Santa Rita Creek through the city are already at capacity and cannot accept increased peak flow rates without flooding.
- Detention storage will be required for all new development that contributes to the Markeley Swamp stormwater sub-system and to the Santa Rita Creek stormwater sub-system.
- Detention storage will be required for all new development in the WASP area that contributes to Gabilan Creek, to avoid adversely impacting Carr Lake and the Reclamation Ditch.
- The hydraulic capacity of the Boronda Road storm drain flowing to Gabilan Creek is 50 cfs for the 42 inch segment and 120 cfs for the 48 inch segment.

The Stormwater Master Plan (SWMP) also identifies two potential stormwater detention basins within the Plan Area: a 40 acre-foot capacity basin east of San Juan Grade Road (draining to the Santa Rita Creek stormwater sub-basin) and a 40 acre-foot capacity basin immediately north of Boronda Road near McKinnon Street (draining to the Markeley Swamp stormwater sub-basin). The SWMP states that these basins would be added during development of the WASP area.

Under the requirements of the Clean Water Act of 1972, the City of Salinas was required to apply for coverage under the National Pollution Discharge Elimination System (NPDES) Phase II permit, and developed and implemented a Stormwater Management Plan (SWMP) and Stormwater

Development Standards to control and prohibit the discharge of pollutants into the Municipal Storm Sewer System. The SWMP consists of six elements that, when implemented together, are expected to reduce pollutants discharged into receiving water bodies to the Maximum Extent Possible.

The City has developed Best Management Practices (BMPs) to address stormwater quality within the City. The BMPs are intended to maintain surface water quality due to stormwater discharged from the City. New developments within the City are required to comply with the requirements of the SWMP. The City is also responsible for monitoring and reporting on BMPs as a method to fulfill minimum SWMP control measures. The Stormwater Development Standards specify design requirements to be used during development design that, in turn, meets the NPDES requirements for the City.

Existing Flood Protection Facilities

Predicted flood conditions near the project area are shown on FEMA FIRM panels 06053C0207G, 06053C0209G, and 06053C0226G. Delineated flood zones are limited to a small area designated as shaded Zone X immediately east of San Juan Grade Road and south of Norman Way. Flood conditions in Zone X ("Other Flooded Areas") are limited to less than one-foot depth during the 100-year event and/or are subject to flooding between the 100- and 500-year events. The extent of flooding is naturally limited by existing topography. The parts of the project area outside of the shaded Zone X are designated Zone X - minimal flood hazard and would not be expected to have a flood hazard up to the level of the 500-year event. Lands designated as Zone X are outside of the Special Flood Hazard Areas. Changes to land surfaces in these areas do not trigger map revisions and no flood insurance requirements are imposed on structures in these areas.

Figure 3.6-3 (See Section 3.6: *Hydrology and Water Quality*) shows the flood boundaries as delineated by the FEMA FIRM and USACE.

Future Stormwater Drainage Demand and System Improvements

The proposed drainage infrastructure (conceptual level) includes primary storm drain piping along Natividad Road, East Boronda Road, San Juan Grade Road, parallel to El Dorado Drive through the WASP area, and an east-west line along new Road C. Altogether, these pipelines total roughly 25,000 feet in length. Five combination detention/water quality basins and water retention basins are planned for the southwest, northwest, central and southeast parts of the area. Following treatment in a water quality treatment/detention basin, stormwater which is not retained in a retention basin will discharge to the four existing storm drain inlets: Natividad Road at East Boronda Road, Santa Rita Creek at San Juan Grade Road, Dartmouth Way at East Boronda Road, and McKinnon Street at East Boronda Road. Low runoff flows would be retained in local Low Impact Development features and/or water quality management features. During periods when there are no significant rainfall events, little or no flows to the external storm drains will occur. Runoff which is retained in these features will be used by plantings, evaporate, or percolate into the ground.

Low Impact Development (LID) principles would be applied throughout the Plan Area to help manage the existing site hydrology to the maximum extent practicable by storing, infiltrating, and detaining runoff. The proposed LID features include pervious strips concentrated along residential

streets and at driveways to disconnect developed lots from the drainage system, bio-swales, on-site bio-retention, and porous pavement. Underdrains may be installed where soils have low permeability, to prevent extended ponding of trapped water.

Water quality management features will be included, referred to as Best Management Practice features (BMPs). These features will include: vegetated linear swales (bio-swales) and extended detention depressions as well as the water quality basins associated with the retention/detention basins previously described. Extended detention depressions will be located in pocket parks distributed across the Plan Area.

A storm drain preliminary design for the proposed project (Wood Rogers, 2007) states that each water quality basin will detain/retain the water quality design storm, and that the retention basin will store the additional volume of runoff caused by the development above the pre-development runoff during the design event[2]. In each of the water quality basin locations, storm drain flows enter a water quality basin where the water is detained and treated and then is discharged at a limited rate into an external storm drain. When inflows to the water quality basin exceed allowable discharge rates, the excess water flows to a retention basin where the water evaporates or percolates into the ground. If retention basin capacity is reached, overflows will be directed to the external storm drain. The size of the proposed supplemental basins has not been determined.

The water quality treatment approach which is proposed for the area is intended to fully comply with local and state requirements and to meet the LID guidelines. A combination of LID features and stormwater treatment BMPs has been shown to substantially reduce the concentrations of a wide range of contaminants in both surface runoff and in water that percolates into the ground. The addition of supplemental water quality treatment basins further reduces the potential transport of contaminants from the Plan Area to the storm drain system and receiving waters.

REGULATORY SETTING - STORMWATER

Federal

CLEAN WATER ACT

The Clean Water Act (CWA) regulates the water quality of all discharges into waters of the United States including wetlands, perennial and intermittent stream channels. Section 401, Title 33, Section 1341 of the CWA sets forth water quality certification requirements for "any applicant applying for a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters." Section 404, Title 33, Section 1344 of the CWA in part authorizes the U.S. Army Corps of Engineers to:

[2] The City of Salinas Stormwater design standards, defined in "Stormwater Standards for New and Redevelopment Projects" (City of Salinas, December 2013).

- Set requirements and standards pertaining to such discharges: subparagraph (e); Issue permits "for the discharge of dredged or fill material into the navigable waters at specified disposal sites": subparagraph (a);
- Specify the disposal sites for such permits: subparagraph (b);
- Deny or restrict the use of specified disposal sites if "the discharge of such materials into such area will have an unacceptable adverse effect on municipal water supplies and fishery areas": subparagraph (c);
- Specify type of and conditions for non-prohibited discharges: subparagraph (f);
- Provide for individual State or interstate compact administration of general permit programs: subparagraphs (g), (h), and (j);
- Withdraw approval of such State or interstate permit programs: subparagraph (i);
- Ensure public availability of permits and permit applications: subparagraph (o);
- Exempt certain Federal or State projects from regulation under this Section: subparagraph (r); and,
- Determine conditions and penalties for violation of permit conditions or limitations: subparagraph (s).
- Section 401 certification is required prior to final issuance of Section 404 permits from the U.S. Army Corps of Engineers.

The California State Water Resources Control Board and RWQCBs enforce State of California statutes that are equivalent to or more stringent than the Federal statutes. RWQCBs are responsible for establishing water quality standards and objectives that protect the beneficial uses of various waters. In the Salinas Planning Area the RWQCB is responsible for protecting surface and groundwater from both point and non-point sources of pollution. Water quality objectives for all of the water bodies within the Salinas Planning Area were established by the RWQCB and are listed in its Basin Plan.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

National Pollutant Discharge Elimination System (NPDES) permits are required for discharges of pollutants to navigable waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, the ocean, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the Federal Clean Water Act, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.)

The RWQCB issues these permits in lieu of direct issuance by the Environmental Protection Agency, subject to review and approval by the Environmental Protection Agency Regional Administrator. The terms of these NPDES permits implement pertinent provisions of the Federal Clean Water Act and the Act's implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti- degradation. In general, the discharge of pollutants is to

be eliminated or reduced as much as practicable so as to achieve the Clean Water Act's goal of "fishable and swimmable" navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also Waste Discharge Requirements issued under the authority of the CWA.

These NPDES permits regulate discharges from publicly owned treatment works, industrial discharges, stormwater runoff, dewatering operations, and groundwater cleanup discharges. NPDES permits are issued for five years or less, and are therefore to be updated regularly. To expedite the permit issuance process, the SWRCB has adopted several general NPDES permits, each of which regulates numerous discharges of similar types of wastes. The SWRCB has issued general permits for stormwater runoff from industrial and construction sites statewide. Stormwater discharges from industrial and construction activities in the Central Coast Region can be covered under these general permits, which are administered jointly by the SWRCB and RWQCB. The SWRCB adopted general permits for Phase II Regulated Small MS4s and Small Construction Activity. On March 10, 2003, Operators of Phase II Regulated Small MS4s and Small Construction Activity were required to obtain permit coverage.

The California Regional Water Quality Control Board issued an NPDES permit to the City of Salinas which regulates development within city limits (Central Coast Regional Water Quality Control Board, May 2012). This permit imposes multiple regulations, including the following key requirements.

1) Listed impairments to receiving waters from the project area (Santa Rita Creek, Gabilan Creek, Reclamation Ditch) include: nitrate, ammonia, fecal coliforms, E. Coli, Turbidity, priority organics, pesticides, copper, and low pH.
2) Discharges which contribute to exceedances of water quality standards and are not reduced to the maximum extent practicable are prohibited.
3) Projects in future growth areas (including WASP) are required to manage rainfall at the source using uniformly distributed decentralized controls, natural treatment, and volume reduction BMPs (e.g. bio-retention, vegetated swales, filter strips) as the first means of meeting stormwater management criteria.
4) Erosion and sediment control BMPs shall be installed to reduce pollutant discharges from construction areas and to control ongoing sediment production from slopes and channels.
5) Soil stabilization shall be implemented on disturbed areas immediately following the completion of earth disturbing activities.
6) Source control BMPs shall be implemented in projects to minimize the discharge of pollutants.

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

Salinas County is a participant in the National Flood Insurance Program (NFIP), a Federal program administered by FEMA. Participants in the NFIP must satisfy certain mandated floodplain management criteria. The National Flood Insurance Act of 1968 has adopted as a desired level of protection, an expectation that developments should be protected from floodwater damage of the Intermediate Regional Flood (IRF). The IRF is defined as a flood that has an average frequency of

occurrence on the order of once in 100 years, although such a flood may occur in any given year. Communities are occasionally audited by the Department of Water Resources to insure the proper implementation of FEMA floodplain management regulations.

State

DEPARTMENT OF WATER RESOURCES

The Department of Water Resources' (DWR) major responsibilities include preparing and updating the California Water Plan to guide development and management of the State's water resources, planning, designing, constructing, operating, and maintaining the State Water Resources Development System, protecting and restoring the Sacramento-San Joaquin Delta, regulating dams, providing flood protection, assisting in emergency management to safeguard life and property, educating the public, and serving local water needs by providing technical assistance. In addition, the DWR cooperates with local agencies on water resources investigations; supports watershed and river restoration programs; encourages water conservation; explores conjunctive use of ground and surface water; facilitates voluntary water transfers; and, when needed, operates a State drought water bank.

CALIFORNIA WATER CODE

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act). The Porter-Cologne Act grants the State Water Resource Control Board (SWRCB) and each of the RWQCBs power to protect water quality, and is the primary vehicle for implementation of California's responsibilities under the Federal Clean Water Act. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a water quality control plan (Basin Plan) for its region the regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

The Water Code Section 13260 requires all dischargers of waste that may affect water quality in waters of the state to prepare and provide a water quality discharge report to the RWQCB. Section 13260a-c is as follows:

> (a) Each of the following persons shall file with the appropriate regional board a report of the discharge, containing the information that may be required by the regional board:

(1) A person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a community sewer system.

(2) A person who is a citizen, domiciliary, or political agency or entity of this state discharging waste, or proposing to discharge waste, outside the boundaries of the state in a manner that could affect the quality of the waters of the state within any region.

(3) A person operating, or proposing to construct, an injection well.

(b) No report of waste discharge need be filed pursuant to subdivision (a) if the requirement is waived pursuant to Section 13269.

(c) Each person subject to subdivision (a) shall file with the appropriate regional board a report of waste discharge relative to any material change or proposed change in the character, location, or volume of the discharge.

WATER QUALITY CONTROL PLAN FOR THE CENTRAL COAST REGION

The Water Quality Control Plan for the Central Coast Region (Basin Plan) includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term "water quality standards," as used in the Federal Clean Water Act, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards.

The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region's ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes, where they are known. For water bodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plan reflects, incorporates, and implements applicable portions of a number of national and statewide water quality plans and policies, including the California Water Code and the Clean Water Act.

Local

City of Salinas General Plan

The Salinas General Plan establishes the following goals and policies relative to sewer facilities and stormwater in the General Plan:

Land Use Element

Goal LU-7: Provide sewer service and maintain sewer facilities to meet community need for sewer collection and treatment.

Policy LU-7.1: Provide a sewer system that meets the needs of the community for sewer collection and treatment and work with MRWPCA for sewer treatment needs.

Policy LU-7.2: Review development proposals to ensure that adequate sewer collection and treatment facilities are available to meet the needs of the development without negatively impacting the existing community.

Policy LU-7.3: Maintain the existing sewer system to provide a high level of service to existing neighborhoods.

Policy LU-8.1: Actively coordinate and work with MCWRA to provide and maintain necessary flood control facilities. Policy LU-8.2: Apply appropriate development standards and fees to improve present drainage systems and provide adequate stormwater detention basins and sedimentation ponds with new construction.

Policy LU-8.3: Require new development, to the extent feasible, to provide flood control facilities that are visually attractive and ecologically beneficial, and require on-going maintenance of the facilities by the development through a maintenance district.

Policy LU-8.4: Continue the use of Carr Lake as a reclamation/flood control facility in addition to its other functions in addressing water quality, enhancing traffic/circulation, and creating recreational opportunities.

Conservation/Open Space Element

Policy COS-1.5: Cooperate with the Monterey County Water Resources Agency, the State Water Resources Control Board and the Regional Water Quality Control Board to implement programs that address the two primary causes of poor water quality in the planning area: salt water intrusion and nitrate contamination.

Policy COS-1.6: Enforce national (NPDES) requirements and participate in regional efforts to protect and enhance water quality.

Safety Element

Policy S-4.4: Maintain open areas needed to retain stormwater and prevent flooding of urban or agricultural land.

Policy S-4.5: Provide storm-water retention capacity consistent with Reclamation Ditch capacity to avoid damage to urban development as a result of a 100-year flood.

City of Salinas General Plan EIR

The following mitigation measures were provided in the City of Salinas General Plan EIR to reduce impacts to hydrology and water quality:

> **Mitigation Measure HW1.** The City will implement Implementation Program COS-1 on an ongoing basis and in response to development proposals. Implementation Program COS-1 requires new development projects and substantial rehabilitation projects to incorporate Best Management Practices (BMPs) pursuant to the National Pollutant Discharge Elimination System (NPDES) permit to ensure the City complies with applicable state and federal regulations.
>
> **Mitigation Measure HW4.** The City will implement Implementation Program COS-3 on an ongoing basis. Implementation Program COS-3 requires the City, consistent with County of Monterey Draft General Plan Policy ER6.3, if adopted, to cooperate with Monterey County, the Regional Water Quality Control Board Central Coast (Region 3) and the Monterey County Water Resources Agency (MCWRA), providing technical assistance when necessary to help identify, protect, and preserve critical aquifer recharge areas so that their function is maintained and ground water quality is not further degraded.
>
> **Mitigation Measure HW5.** The City will implement Implementation Program LU-17, on an ongoing basis. Implementation Program LU-17 requires, as a condition of project approval, new development to provide adequate stormwater and flood management facilities to control direct and indirect erosion and discharges of pollutants and/or sediments so that "no net increase in runoff" occurs as a result of the proposed project. In order to determine the facility and Best Management Practices (BMP) needs, the City will require, when necessary, a hydrological/drainage analysis to be performed by a certified and City-approved engineer, with the cost of said analysis the responsibility of the project applicant.

Salinas Municipal Code

In 2012 the Central Coast RWQCB adopted Order No. R3-2012-0005, which is the City's NPDES Permit (Permit No. CA0049981) for municipal stormwater and urban runoff discharges within the City. To comply with the permit, the City developed a variety of stormwater management programs to effectively prohibit non-stormwater discharges and to reduce the discharge of pollutants to the maximum extent practicable, including the *Stormwater Management Plan* (SWMP). The SWMP is based on the requirements and guidelines contained in the City's NPDES Permit, as well as relevant portions of other local and regional stormwater guidance documents and programs. In compliance with the Phase I regulations, the SWMP is a comprehensive document designed to reduce the discharge of pollutants to the maximum extent practicable and to protect water quality. The SWMP includes all of the required and recommended control programs for municipal facilities, industrial facilities, and commercial facilities. The SWMP programs include urban runoff control policies,

outreach and education efforts, site visits and inspections. These programs guide the implementation of specific stormwater BMPs.

Chapter 29 of the Salinas Municipal Code, known as the "City of Salinas Stormwater Management and Discharge Control Ordinance" states:

> The purpose and intent of this chapter is to ensure the health, safety and general welfare of citizens, and protect the water quality of watercourses and water bodies in a manner pursuant to and consistent with the requirements of the NPDES permit issued to the city of Salinas by the California Regional Water Quality Control Board and the Federal Clean Water Act (33 U.S.C. Section 1251 et seq.) by reducing pollutants in urban stormwater discharges to the maximum extent practicable and by effectively prohibiting non-stormwater discharges to the storm sewer drain system. The provisions of this chapter shall be implemented and enforced in such a manner as to prevent or reduce downstream erosion, to protect stream habitat and to implement controls for the post-development runoff and discharges. To that end, development within the jurisdictional authority of the city of Salinas shall be done in a manner consistent with low impact development guidance set forth in the stormwater development standards document established by the city of Salinas.

CHAPTER 36 INDUSTRIAL WASTE, WASTEWATER COLLECTION AND DISCHARGE

Sec. 36-5. - Permit required to connect.

It shall be unlawful for any person to connect any building sewer to any special sewer without a permit therefor having been first obtained from the director.

Sec. 36-8. - Unsanitary disposal of waste prohibited.

It shall be unlawful for any person to place, deposit or permit to be deposited in any unsanitary manner on public or private property within the city or in any area under the jurisdiction of said city any human or animal excrement, garbage or other objectionable wastes. (Ord. No. 1870 § 3.)

Sec. 36-9. - Disposal of sewage to natural outlet prohibited.

It shall be unlawful for any person to place, deposit or permit to be deposited in any unsanitary manner or public or private property within the city or in any area under the jurisdiction of said city any human or animal excrement, garbage or other objectionable wastes. It shall be unlawful to discharge to any natural outlet (to include stormdrains) within the city or in any area under the jurisdiction of said city any sewage or other polluted waters except where suitable treatment has been provided in accordance with the provisions of this chapter. Any discharge into a natural outlet requires a discharge permit from the Regional Water Quality Control Board. (Ord. No. 1870 § 3; Ord. No. 2102 (NCS).)

Sec. 36-9.1. - Disposal of toxic pollutants to natural outlet prohibited.

It shall be unlawful to discharge to any natural outlet, including stormdrains, toxic pollutants and other hazardous materials. (Ord. No. 2102 (NCS).)

Sec. 36-11. - Plumbing code applicable to private sewage systems.

All private sewage disposal systems shall conform with the city plumbing code currently in effect. (Ord. No. 1870 (NCS), § 3.)

Sec. 36-12.1. - Permit from MRWPCA required.

Final approval for a sanitary sewer permit is contingent upon the compliance with requirements of the Monterey Regional Water Pollution Control Agency (MRWPCA). (Ord. No. 2102 (NCS).)

Sec. 36-20.4 Rules and Regulations

Stormwater, ground water, rain water, street drainage, roof runoff and unpolluted water shall not be discharged through direct or indirect connections to the city's industrial waste sewer line unless special approval in writing is authorized by the director. (Ord. No. 2102 (NCS).)

City of Salinas Stormwater Master Plan

The City of Salinas Stormwater Master Plan makes the following statements regarding the potential effects of urbanization in the project area:

- Existing storm drains within Salinas are at maximum capacity and cannot accept increased peak flows without causing additional flooding.
- Certain reaches of Santa Rita Creek through the city are already at capacity and cannot accept increased peak flow rates without flooding.
- Detention storage will be required for all new development that contributes to the Markeley Swamp stormwater sub-system and to the Santa Rita Creek stormwater sub-system.
- Detention storage will be required for all new development in the WASP area that contributes to Gabilan Creek, to avoid adversely impacting Carr Lake and the Reclamation Ditch.
- The hydraulic capacity of the Boronda Road storm drain flowing to Gabilan Creek is 50 cfs for the 42-inch segment and 120 cfs for the 48-inch segment.

The Stormwater Master Plan also identifies two potential stormwater detention basins within the proposed project area: a 40 SF capacity basin east of San Juan Grade Road (draining to the Santa Rita Creek stormwater sub-basin) and a 40 SF capacity basin immediately north of Boronda Road near McKinnon Street (draining to the Markeley Swamp stormwater sub-basin). The plan states that these basins would be added during development of the project area.

City of Salinas Stormwater Standards for New and Redevelopment Projects

Local stormwater management regulations are provided in the "Stormwater Standards for New and Redevelopment Projects" (2013), referred to as the Salinas Stormwater Development Standards (SWDS). This update of the SWDS was made in part to incorporate the requirements of the updated NPDES permit issued to the City. The regulations pertinent to this EIR, given the project size, are summarized below in Table 3.11-14.

TABLE 3.11-14: SUMMARY OF APPLICABLE CITY OF SALINAS REQUIREMENTS

SWDS SECTION	*APPLICABLE PROJECT IMPACT*	*LIMITATION OR SPECIFICATION*
2.1.1	Runoff generated by all portions of the specific plan	Include in treatment design
2.2.1	Changes in ground surface	1) Minimize impervious area 2) Limit disturbances of natural drainage features 3) Minimize compaction of highly permeable soils 4) Minimize clearing grading of native vegetation
2.2.1	Pollution source control	BMPs must be applied to all impervious areas and incorporate landscaping that minimizes runoff and promotes infiltration
2.2.4	Retention of runoff from impervious areas	Discharges from all rainfall events up to 0.98 inches of rainfall in 24 hours (95th percentile storm event) shall be prevented using retention and infiltration
2.2.5	Control of peak storm flows	Post development peak storm flows shall not exceed pre-project peak flows for the 2- through 100-year events. A calibrated continuous simulation hydrologic model must be used to evaluate stormwater control measures.
3.3.2.1	Proximity of BMPs to potable water wells	Minimum of 100 feet separation
3.3.2.3	Depth from infiltration BMPs to groundwater	Minimum of 5 feet for indirect infiltration features and 10 for direct infiltration features
4.5.1 and 4.6	Attenuation of peak flows to pre-project conditions	Reduction of the 100-year peak post project flow to the 10-year peak pre-project flow is not required. "Peak matching" (section 2.2.5) is sufficient. Adequate mitigation of the 2-year peak flow is assumed if the 10-year peak project flow is reduce to pre-project discharge.
5.9	Detention of discharges flowing to Carr Lake	Monterey County Water Resources Agency criteria will be met (see below).
5.9	Detention/retention facility sizing calculations	24-hour duration storms shall be used for detention facility sizing.
6.1.4	Control of potential groundwater contamination	Only indirect infiltration (infiltration after treatment in a BMP) is allowed when there is potential for contaminant spills or transportation of contaminants from contributing areas.

The purpose of these SWDS is to assist project applicants for new and redevelopment projects in complying with stormwater management requirements set forth by both the City of Salinas and the Central Coast RWQB. New and redeveloped projects are required to implement Low Impact Development (LID) principles. The Stormwater Standards for New and Redevelopment Projects

contains both stormwater design requirements and LID design guidance. LID features are intended to minimize the impacts of urban runoff to receiving waters and to promote healthy watersheds. LID features are designed to capture and treat runoff from relatively frequent rainfall events and are designed to promote infiltration where feasible.

Reclamation Ditch Watershed Impact Fee/Draft Nexus Study Summary Report

The Monterey County Water Resources Agency (MCWRA) oversees the development and implementation of water quality, water supply, and flood control projects in Monterey County, including operation and maintenance of the Reclamation Ditch. The Reclamation Ditch is part of a complex drainage system within the lower Salinas Valley. The final draft (August 2006) of the MCWRA's *Reclamation Ditch Watershed Impact Fee/Nexus Study Summary Report* ("Draft Nexus Study"), while not adopted, provides useful background information related to the current state of the Reclamation Ditch system.

The MCWRA has imposed regulations for floodplains in the County. Pertinent regulations include the following:

1. Lands within the FEMA FIRM identified 100-year floodplain (Special Hazards Areas) and areas within 200 feet of a river or with 50 feet of a watercourse are subject to these regulations.
2. No construction is allowed within regulatory floodways or Zones AE.
3. Any encroachment into a regulatory floodway shall not result in any increase of base flood elevations.
4. New construction shall have the lowest floor, including basement, elevated to at least one foot above the base flood elevation.

THRESHOLDS OF SIGNIFICANCE- STORM WATER

Consistent with Appendix G of the CEQA Guidelines, the proposed project may have a significant impact on the environment associated with Utilities if it would:

1. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

IMPACTS AND MITIGATION MEASURES - STORM WATER

Impact 3.11-8: The proposed project has the potential to require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects (Less than Significant)

The Plan Area is currently agricultural land and does not maintain an active urban drainage system. The proposed project includes water quality BMPs, detention basins, and retention basins, and is designed to minimize or eliminate increases in runoff entering surface water courses and storm

drains. The calculations by Wood Rogers (June 2007) indicate that peak runoff and total volume of runoff would be reduced by the proposed development. Consequently, infiltration into the ground water aquifers would be maintained or potentially increased by the project. The preliminary drainage system plan for the proposed project is shown in Figure 3.11-3. No new or expanded existing off-site infrastructure is proposed or would be required. Proposed project storm water infrastructure would be developed on-site, with connections made to off-site existing storm drain pipes along existing rights-of-way (such as along McKinnon Street). Installation of storm drainage infrastructure would occur during the construction phase of the proposed project.

The construction of these new on-site storm water drainage facilities, which are associated with the proposed project, has the potential to cause environmental impacts. The potential for environmental impacts associated with the installation of the water system, and all construction activities within the Plan Area, are addressed throughout this EIR. In some cases, the direct and indirect impacts are potentially significant and warrant mitigation measures, while in other cases there are significant and unavoidable impacts. The installation of the water system for the WASP project does not cause any impacts above what is already analyzed and disclosed for each environmental topic in this EIR. This is a ***less than significant*** impact relative to this environmental question.

Impact 3.11-9: Cumulative Impact on Stormwater Facilities (Less than Significant and Less than Cumulatively Considerable)

No portion of the Specific Plan Area is located within a 100-year flood hazard zone. A small flood hazard area is identified as Zone X and is located in a local depression adjacent to San Juan Grade Road where Santa Rita Creek flows next to the road, across from the Specific Plan Area. Flood conditions in Zone X ("Other Flooded Areas") are limited to less than one-foot depth during the 100-year event and/or are subject to flooding between the 100- and 500-year events. The extent of flooding is naturally limited by existing topography. Lands designated as Zone X are outside of the Special Flood Hazard Areas. Changes to land surfaces in these areas do not trigger map revisions and no flood insurance requirements are imposed on structures in these areas.

No other parts of the Specific Plan Area are designated as flood prone, and there are no impacts to regulatory floodways or Special Flood Hazard Areas (Zone A or AE) as defined by FEMA. Provided that the storm drain system and detention/retention facilities to be installed as part of the proposed development are adequately sized and properly installed and maintained, additional flooding will not be induced by the proposed project.

Future projects in the area could result in additional discharges of stormwater during storm events which, in theory, could lead to an incremental increase in peak stormwater runoff and potential increases in downstream flood elevations. The Monterey County Water Resources Agency (MCWRA) oversees the development and implementation of water quality, water supply, and flood control projects in Monterey County, including operation and maintenance of the Reclamation Ditch. The Reclamation Ditch is part of a complex drainage system within the lower Salinas Valley.

The MCWRA has imposed regulations for floodplains in the County. Pertinent regulations include the following:

1. Lands within the FEMA FIRM identified 100-year floodplain (Special Hazards Areas) and areas within 200 feet of a river or with 50 feet of a watercourse are subject to these regulations.
2. No construction is allowed within regulatory floodways or Zones AE.
3. Any encroachment into a regulatory floodway shall not result in any increase of base flood elevations.
4. New construction shall have the lowest floor, including basement, elevated to at least one foot above the base flood elevation.

Future development in the area must be sited and designed in accordance with the aforementioned MCWRA regulations. The WASP would not result in a cumulatively considerable contribution to any significant cumulative impacts as future projects would also be subject to the same regulatory limitations.

The WASP would increase the amount of impervious surfaces in the Plan Area, which could increase peak stormwater runoff rates and volumes on and downstream. The WASP includes an extensive system of on-site stormwater collection, treatment and retention facilities to accommodate the increased stormwater flows that would originate in the Specific Plan Area.

Surface runoff from the area will be managed via detention/retention basins and flow reducing Best Management Practices (BMPs) to prevent local flooding within the site. These features will also reduce peak flows from the Specific Plan Area to receiving creeks and storm drains to amounts less than such flows under existing conditions.

The proposed development, including water quality BMPs, detention basins, and retention basins, is designed to minimize or eliminate increases in runoff from these new impervious surfaces entering surface water courses and storm drains. The stormwater runoff calculations completed as part of the Hydrology and Water Quality Technical Study indicate that peak runoff and total volume of runoff will be minimized by the proposed development storm drainage design which retains water to the maximum extent possible.

With the design and construction of flood control improvements, the WASP would not increase peak stormwater runoff. Implementation of the proposed project would have a less than significant cumulative impact relative to this environmental topic. As such, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to stormwater runoff.

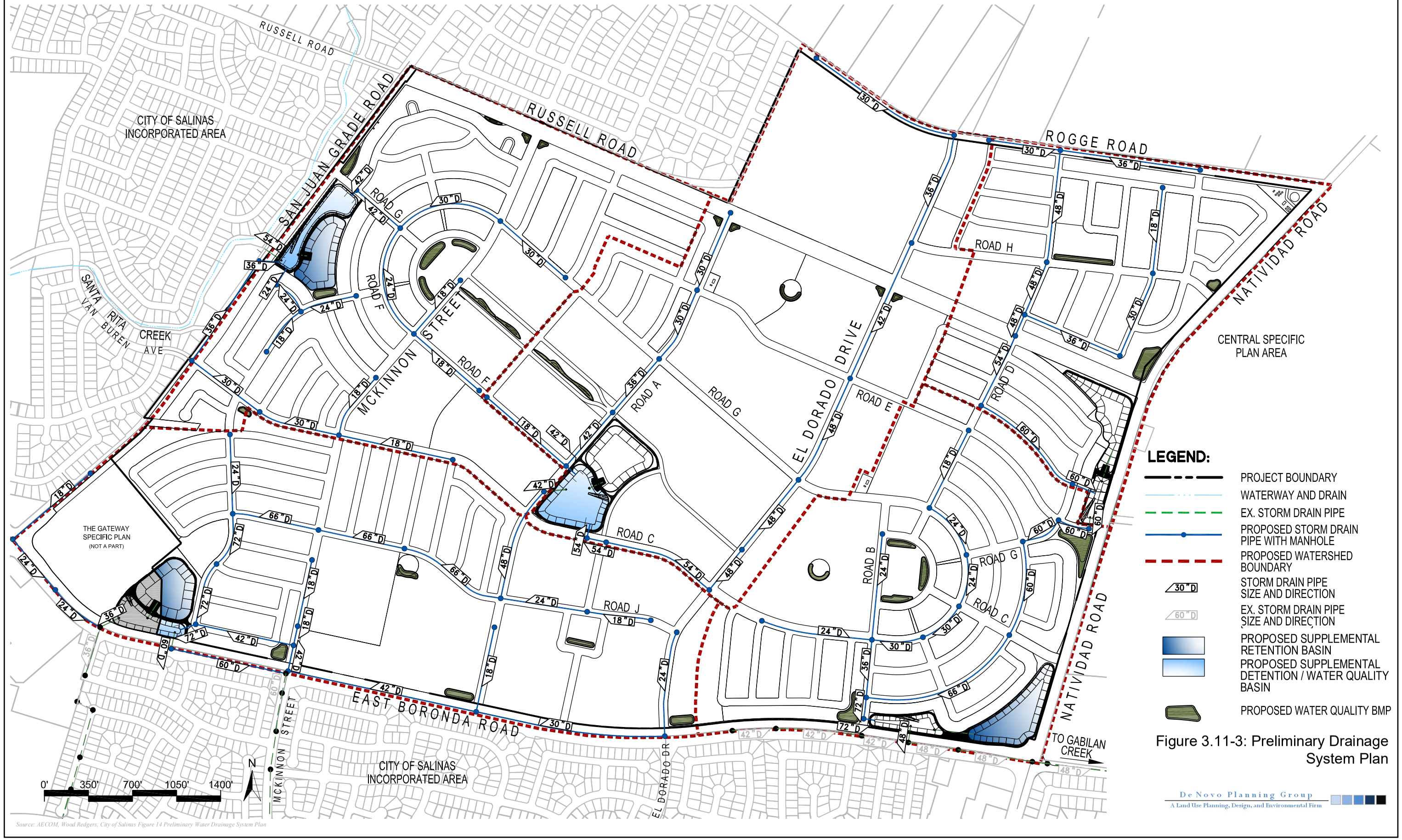


Figure 3.11-3: Preliminary Drainage System Plan

Source: AECOM, Wood Rodgers, City of Salinas Figure 14 Preliminary Water Drainage System Plan

This page left intentionally blank.

3.11.4 SOLID WASTE

EXISTING SETTING

The City of Salinas is served by the Salinas Valley Solid Waste Authority (SVSWA). Solid Waste generated within the Plan Area is collected by Republic Services of Salinas and delivered to SVSWA transfer stations, after which it is sent to the Johnson Canyon Landfill, which SVSWA owns and operates by contract. It is estimated that the landfill has 30 years of disposal capacity to meet the need of current jurisdiction served by the landfill. SVSWA has proposed a comprehensive approach to providing for solid waste disposal needs of its member jurisdictions for approximately 70 years which includes increased waste division and materials recovery as well as the application of advanced technologies for processing solid waste. In addition to providing sufficient long-term capacity, the SVSWA facility improvements would increase the ability of SVSWA's member jurisdictions to achieve their Assembly Bill (AB) 939 diversion mandates.

The Johnson Canyon Landfill is permitted to accept up to 1,574 tons of waste per day and has a permitted capacity of 13.8 million cubic yards and a remaining estimated capacity of 6.9 million cubic yards (as of 7/1/2007). The cease operation date for the facility is December 31, 2040 (CalRecycle, 2015). The average daily volume was approximately 573 tons per day in 2014, and the total annual volume for the landfill in 2014 was 209,028 tons.

Approximately 151,621 tons of solid waste was generated within the SVSWA jurisdiction in 2014.

The City of Salinas achieved a diversion rate of 61 percent in the period of 2005-2006, exceeding the State-mandated requirement of 50 percent. The latest information available from Cal Recycle also shows that the area within the jurisdiction of SVSWA had a solid waste disposal rate of 3.8 pounds per resident per day for household waste and 11.0 pounds per employee for business waste in 2014 (CalRecycle, 2014).

The Johnson Canyon Landfill is permitted to accept agricultural waste, appliances, cardboard, clothing, concrete rubble, demolition debris, dirt (clean fill), garbage, electronics, lumber, recycling-separated plastic and glass containers, aluminum and paper, scrap metal, tires (without rims), wood (clean), tree stumps and branches, and yard waste. The landfill is not permitted to accept hazardous or toxic wastes, including but not limited to aerosols, antifreeze, auto batteries, household cleaners, cooking oil/grease, electronic waste, fluorescent light bulbs and tubes, paint, pesticides & fertilizers, pharmaceuticals, sharps (needles or syringes), thermometers or other mercury containing items, thinners and solvents, and used motor oil and filters. These household hazardous items are accepted for free at the Sun Street Household Hazardous Waste (HHW) facility, located in the City of Salinas.

REGULATORY SETTING – SOLID WASTE

State

AB 939: CALIFORNIA'S INTEGRATED WASTE MANAGEMENT ACT OF 1989

California's Integrated Waste Management Act of 1989 (AB 939) set a requirement for cities and counties to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling and composting. In order to achieve this goal, AB 939 requires that each City and County prepare and submit a Source Reduction and Recycling Element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

AB 939 also established requirements for cities and counties to develop and implement plans for the safe management of household hazardous wastes. In order to achieve this goal, AB 939 requires that each city and county prepare and submit a Household Hazardous Waste Element.

AB 341 (75 PERCENT SOLID WASTE DIVERSION)

AB 341 requires CalRecycle to issue a report to the Legislature that includes strategies and recommendations that would enable the state to divert 75 percent of the solid waste generated in the state from disposal by January 1, 2020, requires businesses that meet specified thresholds in the bill to arrange for recycling services by January 1, 2012, and also streamlines various regulatory processes.

SB 1374 (CONSTRUCTION AND DEMOLITION WASTE MATERIALS DIVERSION)

Senate Bill 1374 (SB 1374), Construction and Demolition Waste Materials Diversion Requirements, requires that jurisdictions summarize their progress realized in diverting construction and demolition waste from the waste stream in their annual AB 939 reports. SB 1374 required the CIWMB to adopt a model construction and demolition ordinance for voluntary implementation by local jurisdictions.

CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN)

CALGreen requires the diversion of at least 50 percent of the construction waste generated during most new construction projects (CALGreen Sections 4.408 and 5.408) and some additions and alterations to nonresidential building projects.

Local

CITY OF SALINAS GENERAL PLAN

The City of Salinas General Plan contains the following solid waste disposal and recycling goals and policies that are relevant to the proposed project:

Safety Element

Policy S-3.5: Limit hazardous waste facilities within the planning area to transfer stations, which shall be limited to the collection, temporary storage, and

transfer of small quantity generator and household hazardous waste as specified in the Monterey County Hazardous Waste Management Plan.

Policy S-3.6: Limit the location of a Hazardous Waste Transfer Station to land designated for General Industrial use and ensure that the station conforms to the siting criteria in the Monterey County Hazardous Waste Management Plan.

CITY OF SALINAS MUNICIPAL CODE, CHAPTER 14

Chapter 14 of the Municipal Code regulates the management of garbage, recyclables, and other wastes. Chapter 14 sets forth solid waste collection, disposal, and diversion requirements for residential, commercial, industrial, and other uses and addresses yard waste, hazardous materials, recyclables, and other forms of solid waste. Additionally, Article V, Section 7-500.200 provides supplemental recycling and solid waste disposal regulations.

THRESHOLDS OF SIGNIFICANCE- SOLID WASTE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment associated with Utilities if it will:

1. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

2. Comply with federal, State, and local statutes and regulations related to solid waste.

IMPACTS AND MITIGATION MEASURES

Impact 3.11-10: The proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs and comply with federal, State, and local statutes and regulations related to solid waste (Less than Significant)

Permitted maximum disposal at the Johnson Canyon Landfill is 1,574 tons per day. The total permitted capacity of the landfill is 13.8 million cubic yards, which is expected to accommodate an operational life until December 31, 2040. The addition of the volume of solid waste associated with the WASP to the landfill would not exceed the landfill's remaining capacity. Based on the waste generation factors provided by CalRecycle, the proposed project is expected to generate 48,922 pounds per day of solid waste upon full buildout, which is equivalent to 24.5 tons per day. Shown in Table 3.11-15 is the estimated solid waste generation for the proposed project.

TABLE 3.11-15: *ESTIMATED SOLID WASTE GENERATION*

LAND USE	*GENERATION FACTOR[1]*	*PROJECT*	*ESTIMATED SOLID WASTE (LBS/DAY)*
Retail/Services	6 lb./1,000 s.f./day	571,000 s.f.	3,426 lbs
Residential	10 lb./unit/day	4,340 units	43,400
Schools	0.5 lb./student/day	4,191 students	2,096
TOTAL			**48,922**

[1] CalRecycle

The WASP would be required to comply with applicable state and local requirements including those pertaining to solid waste, construction waste diversion, and recycling. The addition of the volume of solid waste associated with the WASP, approximately 24.5 tons per day at total buildout, would increase the total to the Johnson Canyon Landfill; however, this increase would not cause an exceedance of the landfill's remaining capacity. This is a ***less than significant*** impact.

Impact 3.11-11: Cumulative Impact on Solid Waste Facilities (Less than Significant and Less than Cumulatively Considerable)

Solid waste generated in the City is disposed at the Johnson Canyon Landfill. This landfill is permitted through the year 2040. The permitted maximum disposal at the Johnson Canyon Landfill is 1,574 tons per day. Currently, the average daily disposal is approximately 573 tons per day. The total permitted capacity of the landfill is 6.9 million cubic yards.

The region is expected to add numerous developments through 2035. The Central Area Specific Plan, East Area Specific Plan, and the EDE are three such areas. These new areas would generate an estimated 75 to 100 tons per day at total buildout. In addition, other jurisdictions within the region are likely to generate new sources of solid waste that would need to be processed at the landfill. Nevertheless, the Johnson Canyon Landfill has the capacity to serve nearly three times as much waste per day as it does currently. Implementation of the proposed project would have a less than significant cumulative impact relative to this environmental topic. Therefore, this would result in a ***less than significant*** and a ***less than cumulatively considerable*** impact on solid waste facilities.

CEQA requires an EIR to evaluate a project's effects in relationship to broader changes occurring, or that are foreseeable to occur, in the surrounding environment. Accordingly, this chapter presents a discussion of CEQA-mandated analysis for cumulative impacts, significant irreversible effects, and significant and unavoidable impacts associated with the West Area Specific Plan. Growth Inducement is discussed in Section 3.8, Population and Housing.

4.1 CUMULATIVE SETTING AND IMPACT ANALYSIS

INTRODUCTION

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) contain an assessment of the cumulative impacts that could be associated with the WASP. According to CEQA Guidelines Section 15130(a), "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects (as defined by Section 15130). As defined in CEQA Guidelines Section 15355, a cumulative impact consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. A cumulative impact occurs from:

> *…the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.*

In addition, Section 15130(b) identifies that the following three elements are necessary for an adequate cumulative analysis:

1) Either:

(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or,

(B) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

2) A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and

3) A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

CUMULATIVE SETTING

The cumulative setting uses growth projections listed in the City of Salinas General Plan (General Plan Land Use Table LU-3 Development Capacity), the General Plan Final EIR, and the most recent Economic Development Element as a basis for cumulative growth.

The Salinas General Plan represents the culmination of several years of an intense work program, including over 35 public meetings. The Plan is founded upon the community's vision for the future. Table 4.0-1, below, shows the growth projections as described within the City of Salinas General Plan. The General Plan was approved in September of 2002, and assumes full build-out of the Sphere of Influence.

TABLE 4.0-1: GROWTH PROJECTIONS AT SALINAS GENERAL PLAN BUILDOUT

	TOTAL ACRES	*TOTAL PROJECTED DWELLING UNITS/HOUSING*	*TOTAL PROJECTED NON-RESIDENTIAL SQUARE FEET (THOUSANDS)*	*TOTAL PROJECTED POPULATION*
Open Space Land Use Designations				
Agriculture	22	0	0	0
Open Space	611	0	0	0
Parks	1,272	0	2,771	0
Residential Land Use Designations				
Residential Low Density	3,992	25,950	0	95,235
Residential Medium Density	1,414	16,619	0	60,991
Residential High Density	827	13,846	0	50,816
Commercial/Office Land Use Designations				
Retail				
Citywide	549	155	5,984	570
Central City	9	13	586	49
Office				
Citywide	126	42	1,371	155
Central City	42	63	2,724	230
East Romie Lane Corridor	47	24	1,030	87
Light Industrial/Industrial Land Use Designations				
Business Park	230	0	3,503	0
General Comm./Light Ind.	659	0	8,607	0
General Industrial	1,311	0	17,136	0
Public/Semipublic Land Use Designations				
Public/Semipublic	1,241	0	13,513	0
Salinas Municipal Airport	620	0	1,351	0

	TOTAL ACRES	TOTAL PROJECTED DWELLING UNITS/HOUSING	TOTAL PROJECTED NON-RESIDENTIAL SQUARE FEET (THOUSANDS)	TOTAL PROJECTED POPULATION
Other Land Use Designations				
Mixed Use				
Citywide	231	692	5,026	2,541
Central City	62	339	8,056	1,244
Arterial Frontage	62	312	679	1,145
TOTAL	**13,328**	**58,055**		

SOURCE: CITY OF SALINAS GENERAL PLAN AND GENERAL PLAN EIR, 2002

The City of Salinas Economic Development Element (EDE) was adopted by the City Council on December 5, 2017. The EDE, as a comprehensive, strategic planning document, provides the vision, context, and focus for the community's economic development efforts. The EDE describes areas for potential future expanded economic development, referred to as Economic Opportunity Areas (EOAs), which were identified and mapped through the community outreach process. A total of 25 EOAs were created and policy direction for catalyzing development opportunities in these areas was included in the EDE.

Table 4.0-2 describes the additional development capacity of the EDE. This new development capacity was not originally included in the build-out growth projections provided within the City of Salinas General Plan and General Plan EIR. This total new development capacity consists of that proposed within the EOA target areas located outside the SOI plus the new development capacity within the Target Area for *EOA V - Carr Lake*, as summarized below, in Table 4.0-2.

TABLE 4.0-2: TOTAL NEW ECONOMIC DEVELOPMENT ELEMENT (EDE) DEVELOPMENT CAPACITY

LOCATION	NEW LAND SUPPLY (GROSS ACRES)	NEW BUILDING CAPACITY (SQUARE FEET)
EOA Target Areas Outside the SOI		
Industrial	147	1,502,820
Retail	164	1,383,030
Business Park	132	1,570,338
EOA V - Carr Lake		
Retail	74	810,448

SOURCE: EMC PLANNING GROUP, 2017

CUMULATIVE EFFECTS OF THE PROJECT

Cumulative settings are identified under each cumulative impact analysis. Cumulative settings vary because the area that the impact may affect is different. For example, noise impacts generally only impact the local surrounding area because noise travel a relatively short distance while air quality impacts affect the whole air basin as wind currents control air flow and are not generally affected by natural or manmade barriers which would affect noise. Cumulative project impacts were addressed throughout each Chapter 3.0 section, and are summarized below.

Method of Analysis

Although the environmental effects of an individual project may not be significant when that project is considered separately, the combined effects of several projects may be significant when considered collectively. State CEQA Guidelines 15130 requires a reasonable analysis of a project's cumulative impacts, which are defined as "two or more individual effects which, when considered together are considerable or which compound or increase other environmental impacts." The cumulative impact that results from several closely related projects is: the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonable foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (State CEQA Guidelines 15355[b]). Cumulative impact analysis may be less detailed than the analysis of the project's individual effects (State CEQA Guidelines 15130[b]).

There are two approaches to identifying cumulative projects and the associated impacts. The list approach identifies individual projects known to be occurring or proposed in the surrounding area in order to identify potential cumulative impacts. The projection approach uses a summary of projections in adopted General Plans or related planning documents to identify potential cumulative impacts. This EIR uses the projection approach for the cumulative analysis and considers the development anticipated to occur upon General Plan buildout in the area in addition to the pending and proposed projects in the area.

Project Assumptions

The WASP's contribution to environmental impacts under cumulative conditions is based on full buildout of the Plan Area. See Chapter 2, Project Description, for a complete description of the WASP.

Cumulative Impacts

Some cumulative impacts for issue areas are not quantifiable and are therefore discussed in general terms as they pertain to development patterns in the surrounding region. Exceptions to this are topics like traffic and utilities, which may be quantified by estimating future traffic patterns, pollutant emitters, etc. and determining the combined effects that may result. The potential cumulative impacts associated with the WASP are summarized below. It should be noted that cumulative impact analysis are also previously provided in each of the Chapter 3.0 sections.

AIR QUALITY

The cumulative setting for air quality impacts is the North Central Coast Air Basin (NCCAB), consists of three counties: Santa Cruz County, San Benito County, and Monterey County. The air basin is bounded by mountains the north and east. San Joaquin Air Basin lies to the east, separated by the Diablo Coastal range, with gaps such as Pacheco Pass. The San Francisco Bay Air Basin lies to the north.

Impact 3.1-7: Cumulative impact on the region's air quality (Cumulatively Considerable and Significant and Unavoidable)

Under buildout conditions in the Monterey County, the NCCAB would continue to experience increases in criteria pollutants and efforts to improve air quality throughout the basin would be hindered. Unfortunately, much of the increase in criteria pollutants in Monterey County are out of the control of the communities within Monterey County, since criteria pollutants generated in other air basins flow into the County and the NCCAB (including from the San Francisco Bay Area and SFFAB). As described in previously in this Section, Monterey County has a state designation of nonattainment for ozone and PM_{10}, and is either unclassified or attainment for all other criteria pollutants. Table 3.1-2 (within Section 3.1: Air Quality) presents the state and federal attainment status for Monterey County.

As discussed under Impact 3.1-2, operation of the WASP would result in increased emissions primarily from vehicle miles travelled associated with project implementation and area sources. The MBARD has established operations-related emissions thresholds of significance and it was determined that the Specific Plan's annual emissions of ROG, NOx, and PM_{10} at full buildout would exceed the MBARD's thresholds of significance for these pollutants, even with mitigation.

The main source of pollution can be contributed to mobile source emissions for ROG, NOx, and PM_{10}. Area source emissions for ROG are also a major source of pollution causing the exceedance.

There are limited mitigation inputs available within the California Emission Estimator Model (CalEEMod)™ (v.2016.3.2) to quantify emission reductions for large-scale "plans". As shown in Tables 3.1-9 and 3.1-10 (as shown in Section 3.1: Air Quality), even with mitigation incorporated into the model, the WASP would exceed several of the MBARD's thresholds of significance for operations.

The MBARD's *CEQA Air Quality Guidelines* provides a list of mitigation measures that would help the proposed project comply with the MBARD's *2008 AQMP* and the *Triennial Plan Revision 2009-2011*. As is currently proposed, the WASP is expected to be built out under a staged approach, and all mitigation would be applicable to each phase. However, even with the application of these and other mitigation measures, operational emissions levels would remain above the defined thresholds of significance. As such, implementation of the WASP would have a ***cumulatively considerable contribution*** and ***significant and unavoidable*** impact on the region's air quality.

BIOLOGICAL RESOURCES

The cumulative setting for biological resources includes the Plan Area and the greater Monterey region. Development associated with implementation of the General Plan and EDE would contribute to the ongoing loss of natural and agricultural lands in Monterey County, including within the Plan Area. Cumulative development would result in the conversion of existing habitat to urban uses. The

local General Plan, in addition to regional, State and federal regulations, includes policies and measures that mitigate impacts to biological resources associated with General Plan buildout.

Impact 3.2-12: Cumulative loss of biological resources including habitats and special status species (Cumulatively Considerable and Significant and Unavoidable)

Under cumulative conditions, buildout of the Salinas General Plan, including the recently approved Salinas EDE, will result in cumulative impacts to biological resources through new and existing development. The General Plan includes policies that are designed to minimize impacts to the extent feasible.

There are various biological resources, including habitat, that occurs throughout the region. the Plan Area is intensively cultivated and provides little to no habitat for most special status species. Nevertheless, there remains a potential that special status species could occupy the Plan Area from time to time. Mitigation measures incorporated into the WASP project are intended to avoid, minimize, and compensate for direct and indirect effects to biological resources, including special status species and their habitats.

The WASP project will eliminate the onsite irrigation ditches, which provide some, but relatively little habitat quality. The WASP project is anticipated to eliminate the roadside ditches located along East Boronda Road and San Juan Grade Road. These ditches also provide some, but relatively little habitat quality. Mitigation measures incorporated into the WASP project are intended to ensure that any fill activities are authorized by the appropriate regulatory agencies prior to disturbance. The permit process ensures that minimization and compensation is incorporated into the activity.

The WASP project will change the habitat type from an open agricultural field to an urban developed area. Urban development will provide habitat for a variety of species; however, it will be lower quality habitat then the current agricultural land. While the City has evaluated urban development in the Plan Area extensively through the General Plan and FGA process, and subsequently determined that urban development in this location is appropriate, the physical change is not reversible and there are no mitigation measures that can fully mitigate this impact. implementation of the WASP would have a ***cumulatively considerable contribution*** and ***significant and unavoidable*** impact to biological resources.

CULTURAL RESOURCES

The geography of cultural resources impact can be defined by region, by political subdivision or by the geography of the cultural resources present in an area, where sufficient inventory data is available to define it. The cumulative setting for cultural resources includes all of the Monterey County. There are extensive cultural sites located in the region. Generally, these sites are related to Native Americans which lived in the area; however, there are also numerous historical resources such as nearby ranches.

Impact 3.3-5: Cumulative impacts on known and undiscovered cultural resources (Less than Significant and Less than Cumulatively Considerable)

The cumulative setting for cultural resources includes the City of Salinas Planning Area and the surrounding unincorporated areas of Monterey County. While there are extensive documented cultural resources in Salinas and unincorporated Monterey County, there are no cultural resources that were found during field surveys for the proposed project. Additionally, there are no cultural resources that have been identified in the Specific Plan Area on maps and files maintained by the Northwest Information Center (NWIC). There have been three previous cultural resource studies that examined approximately three-quarters of the Specific Plan Area and no cultural resources were documented. The Monterey County Historic Property Data File Directory and National Register of Historic Resources do not list any cultural resources in the Specific Plan Area. Mitigation measures incorporated into this EIR would require the proposed project to evaluate any cultural resources discovered during construction activities. Any significant discoveries during construction would be required to be preserved, either through relocation or documentation and the project is not anticipated to considerably contribute to a significant reduction in cultural resources. Implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to cultural resources.

GREENHOUSE GASES AND CLIMATE CHANGE

The cumulative setting for greenhouse gas emissions and climate change impacts for this analysis is Monterey County. It should be noted that emissions of greenhouse gases is necessarily a global impact, since emissions in one part of the world circulate throughout the earth's atmosphere.

Impact 3.4-4: Cumulative impact on climate change from increased project-related greenhouse gas emissions (Cumulatively Considerable and Significant and Unavoidable)

Greenhouse gas emissions from a single project will not cause global climate change; however, greenhouse gas emission from multiple projects throughout a region or state could result in a cumulative impact with respect to global climate change.

In California, there has been extensive legislation passed with the goal of reducing greenhouse gas emissions. The legislative goals are as follows: 1) 2000 levels by 2010, 2) 1990 levels by 2020, 3) 40% below 1990 levels by 2030, and 4) 80% below the 1990 levels by the year 2050. To achieve these goals the California Air Resources Board has developed regional greenhouse gas emission reduction targets for the automobile and light truck sectors (the largest single source of greenhouse gas emissions) for 2020 and 2035. The regional greenhouse gas emission reduction targets for each region in California were established the California Air Resources Board.

As described in Impact 3.4-2, implementation of the proposed project will still generate GHG emissions that wouldn't otherwise exist without the proposed project. Given the length of construction activities for a project of this size, the construction emissions would be a long-term release of approximately 168,734.3 MT CO_2e. The operational emissions would be a long-term release totaling approximately 51,939.2 MT CO2e per year without mitigation, and 47,684.9MT CO_2e

per year with mitigation. The City of Salinas must weigh the economic and social benefits of development against the environment impacts associated with development. The City of Salinas's planning efforts included targeted growth that accommodates the economic and social needs of the community, while recognizing and seeking to mitigate environmental impacts when growth occurs. The use of New Urbanism principals, which emphasize compact, walkable communities, and which were incorporated into the design of the proposed project, would help minimize GHG emissions generated by the proposed project. Further, the proposed project would be required to implement mitigation measures, which is intended to reduce emissions to the maximum extent feasible. The State of California continues to implement measures that are intended to reduce emissions on a State-wide scale (i.e. vehicle fuel efficiency standards in fleets, low carbon fuels, etc.) that are consistent with AB 32. These types of state-wide measures will benefit the proposed project (and city as a whole) in the long-term as they come into effect; however, the City does not have the jurisdiction to create far-reaching (i.e. state-wide) measures to reduce GHG emissions. On a project-by-project case, the City of Salinas evaluates a project and the potential to impose project-specific mitigation, which has been done through this GHG analysis. However, because the project is expected to result in a net increase in CO_2e emissions even with mitigation measures incorporated into the project, implementation of the WASP would have a ***cumulatively considerable contribution*** and ***significant and unavoidable*** impact to greenhouse gases.

HAZARDS AND HAZARDOUS MATERIALS

The cumulative context for the analysis of cumulative hazards and human health impacts is Monterey County, including all cumulative growth therein, as represented by full implementation of each respective General Plan within the County.

Impact 3.5-3: Cumulative impact related to hazards and hazardous materials (Less than Significant and Less than Cumulatively Considerable)

The West Area Specific Plan, in conjunction with cumulative development in the region, includes areas designated for development of a variety of urban, agricultural, and open space uses as defined by the applicable General Plan's. Cumulative development would include continued operation of existing developed area and development of new facilities as allowed under each land use designation.

New development would inevitably increase the use of some hazardous materials within the region, resulting in potential health and safety effects related to hazardous materials use. Any use of hazardous materials must be managed in accordance with federal, state, and local regulations to minimize any risk.

For the most part, potential risks from hazardous materials associated with new and future development would be confined to commercial and industrial areas. There are no specific commercial or industrial users that are proposed with the West Area Specific Plan that would pose a risk related to hazardous materials. Specific users would be required to obtain a conditional use permit, which would allow the City to evaluate any use of hazardous materials in their business operations before the use is approved.

Hazardous materials incidents, if any, are typically site specific and involve accidental spills or inadvertent releases. Associated health and safety risks generally are limited to those individuals using the materials or to persons in the immediate vicinity of the materials. Hazard-related impacts tend to be site-specific and project-specific.

The proposed Project includes the approval and subsequent implementation of a 797-acre Specific Plan Area that includes residential, mixed use commercial, a community park, neighborhood parks, small parks, open space, and storm water detention/retention basins. These uses are not expected to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Additionally, these uses are not expected to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The proposed Specific Plan land uses are not expected to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste.

Implementation of the proposed project would not result in significant increased risks of hazards in the cumulative setting area, nor would it result in any significant off-site or indirect impacts. Mitigation measures have been included to reduce the risk of on-site hazards. Therefore, Implementation of the proposed project would have a less than significant cumulative impact relative to this environmental topic. As such, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to hazards and hazardous materials.

HYDROLOGY AND WATER QUALITY

Potential cumulative issues associated with surface waters can be addressed on a watershed basis, or in the case of groundwater in the context of a groundwater basin. Because water resources are highly interconnected, the cumulative setting is based on Monterey County which is located in the Central Coast Hydrological Region. Cumulative development in this region, including within the Plan Area, would impact the water quality and hydrological features of the Central Coast Hydrologic Region. With respect to surface waters, some runoff from the Specific Plan Area currently flows to Santa Rita Creek and some runoff flows to Gabilan Creek via existing storm drains. Gabilan Creek flows into the Carr Lake basin, while Santa Rita Creek flows westward and enters the Reclamation Ditch near Castroville. The existing storm drain system with inlets along Boronda Road at the east side of the Specific Plan Area currently receives runoff from the Specific Plan Area and will receive some of the future project runoff, conveying it to Carr Lake and the Reclamation Ditch at Carr Lake.

The City of Salinas is located in the Salinas Valley Groundwater Basin Area. The Salinas Valley is the largest coastal groundwater basin in Central California, and is drained by the Salinas River. Salinas Valley extends approximately 150 miles from the headwaters to the mouth of the River at Monterey Bay, draining approximately 5,000 square miles. The western portion of the Specific Plan Area is located in the Alisal Slough-Templadero Slough watershed and the eastern portion of the Specific Plan Area is located in the Natividad Creek-Gabilan Creek watershed.

Impact 3.6-8: Cumulative increases in peak stormwater runoff from the plan area (Less than Significant and Less than Cumulatively Considerable)

Implementation of the WASP would increase the amount of impervious surfaces in the Specific Plan Area, which could increase peak stormwater runoff rates and volumes on and downstream of the Specific Plan Area. However, the WASP includes an extensive system of on-site stormwater collection, treatment and retention facilities to accommodate the increased stormwater flows that would originate in the Specific Plan Area.

Surface runoff from the area will be managed via detention/retention basins and flow reducing Best Management Practices (BMPs) to prevent local flooding within the site. These features will also reduce peak flows from the Specific Plan Area to receiving creeks and storm drains to amounts less than such flows under existing conditions.

The proposed development, including water quality BMPs, detention basins, and retention basins, is designed to minimize or eliminate increases in runoff from these new impervious surfaces entering surface water courses and storm drains. The stormwater runoff calculations completed as part of the Hydrology and Water Quality Technical Study indicate that peak runoff and total volume of runoff will be minimized by the proposed development storm drainage design which retains water to the maximum extent possible.

With the design and construction of flood control improvements, the WASP would not increase peak stormwater runoff. Implementation of the proposed project would have a less than significant cumulative impact relative to this environmental topic. As such, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to stormwater runoff.

Impact 3.6-9: Cumulative impacts related to degradation of water quality (Less than Significant and Less than Cumulatively Considerable)

The project will discharge storm water to Santa Rita Creek and to the existing City storm drain system. As shown in Figure 3.11-3 (within Section 3.11: Utilities), the proposed drainage infrastructure (conceptual level) includes primary storm drain piping along Natividad Road, East Boronda Road, San Juan Grade Road, parallel to El Dorado Drive through the WASP area, and an east-west line along new Road C. Altogether, these pipelines total roughly 25,000 feet in length. Five combination detention/water quality basins and water retention basins are planned for the southwest, northwest, central and southeast parts of the area. Following treatment in a water quality treatment/detention basin, storm water which is not retained in a retention basin will discharge to the four existing storm drain inlets: Natividad Road at East Boronda Road, Santa Rita Creek at San Juan Grade Road, Dartmouth Way at East Boronda Road, and McKinnon Street at East Boronda Road.

Construction of the WASP would contribute to a cumulative increase in urban pollutant loading, which could adversely affect water quality. Cumulative development in the Salinas area, including within the Plan Area, would also result in increased impervious surfaces that could increase the rate and amount of runoff, thereby potentially adversely affecting existing surface water quality through

increased erosion and sedimentation. The primary sources of water pollution include: runoff from roadways and parking lots; runoff from landscaping areas; non-stormwater connections to the drainage system; accidental spills; and illegal dumping. Runoff from roadway and parking lots could contain oil, grease, and heavy metals; additionally, runoff from landscaped areas could contain elevated concentrations of nutrients, fertilizers, and pesticides.

The WASP will be required to comply with Mitigation Measure 3.6-1 which requires the development and approval of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP will include BMPs to regulate stormwater quality for the Specific Plan Area. In accordance with the National Pollution Discharge Elimination System (NPDES) Stormwater Program, Mitigation Measure 3.6-1 ensures compliance with existing regulatory requirements to prepare a SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the Regional Water Quality Control Board (RWQCB), Central Coast Region, has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The RWQCB has stated that these erosion control measures are only examples of what should be considered and should not preclude new or innovative approaches currently available or being developed. The specific controls are subject to the review and approval by the RWQCB and are an existing regulatory requirement.

While there are no assurances that other projects in the City/County would incorporate the same degree or methods of treatment as the WASP, several of the projects within the City of Salinas would phase out existing agricultural runoff discharges from their respective sites and, similar to the WASP, could provide some level of water quality improvement. Also, each project in the City that would discharge stormwater runoff would be required to comply with NPDES discharge permits from the RWQCB, which adjusts requirements on a case-by-case basis to avoid significant degradation of water quality. Therefore, while a greater quantity of urban runoff may result from implementation of other future projects, because of an increase in impervious surfaces, the associated surface water quality impacts would be expected to be less than significant because of improved or similar quality of runoff compared to existing conditions.

Compliance with City and County water quality protection regulations, approval from the RWQCB, and implementation of Mitigation Measure 3.6-1 would ensure that the WASP minimizes impacts to surface water quality. Implementation of the proposed project would have a less than significant cumulative impact relative to this environmental topic. As such, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to the potential for degradation of water quality.

Impact 3.6-10: Cumulative impacts related to degradation of groundwater supply or recharge (Less than Significant and Less than Cumulatively Considerable)

The WASP would result in new impervious surfaces and could reduce rainwater infiltration and groundwater recharge in those areas. Infiltration rates vary depending on the overlying soil types. In general, sandy soils have higher infiltration rates and can contribute to significant amounts of ground water recharge; clay soils tend to have lower percolation potential; and impervious surfaces such as pavement significantly reduce infiltration capacity and increase surface water runoff.

The proposed development, including water quality BMPs, detention basins, and retention basins, is designed to minimize or eliminate increases in runoff from these new impervious surfaces entering surface water courses and storm drains. The stormwater runoff calculations completed as part of the Hydrology and Water Quality Technical Study indicate that peak runoff and total volume of runoff will be minimized by the proposed development storm drainage design which retains water to the maximum extent possible. Consequently, infiltration into the ground water aquifers will be maximized to the extent possible through the storm drainage design.

The project would provide three new wells to be constructed as development progresses. The first well would likely be operational at the time initial development occurs. The assumption for the design capacity of the three new Specific Plan area wells is 1,200 gpm each. The first well that would be functioning in 2020 would add 1,200 gpm capacity, or 1,937 AFY. Thus, in 2020, the total design capacity of wells serving the City of Salinas including the Specific Plan area would be 52,592 AFY (44,843 AFY + 5,812 AFY + 1,937 AFY = 52,592 AFY).

In addition to constructing new wells, the project will modify the movement of water across the land surface and the infiltration of rain water into the groundwater system. The aquifers underlying the Plan Area are impacted by nitrate contamination. Groundwater in the project vicinity is subject to increasing salinity due to seawater intrusion from Monterey Bay. Both of these impairments affect use of the groundwater for potable water supplies and use for irrigation. The proposed project, if no means were provided to preserve infiltration of rainwater, would likely reduce net infiltration of rain water and runoff into the groundwater system and reduce the diluting effect of this fresh water supply. The net impact would be a further increase in salinity intrusion and build-up of contaminants in the groundwater in the Salinas basin. However, the proposed project without mitigation would also likely decrease the amount of nitrates entering the groundwater from the Plan Area, due to elimination of agricultural fertilizer application. Surface water quality detention basins and BMPs also have the potential to add to groundwater contamination levels if they are not properly designed and sited.

The proposed project, without mitigating features, would reduce infiltration of rainwater and runoff into the local groundwater system due to the increase in impermeable area. The total annual rainfall depth in an average year is approximately 16 inches and the project surface area is approximately 797 acres, producing an annual rainfall volume of approximately 1,060 AF. Nearly all of this area is currently in agriculture, while the proposed project could convert as much as 60 percent of the area to impervious surfaces, resulting in a reduction in groundwater recharge in the range of 400 to 600 AF.

With implementation of Mitigation Measure 3.6-5 and 3.6-6, the WASP would not cause the substantial depletion of groundwater supplies or interfere substantially with groundwater recharge. Implementation of the proposed project would have a less than significant cumulative impact relative to this environmental topic. As such, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to the potential for degradation of groundwater supply or recharge.

Impact 3.6-11: Cumulative impacts related to flooding (Less than Significant and Less than Cumulatively Considerable)

As shown on Figure 3.6-3 (Section 3.6: Hydrology and Water Quality), predicted flood conditions in the vicinity of the Specific Plan Area are shown on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panels 06053C0207G, 06053C0209G, and 06053C0226G. No portion of the Specific Plan Area is located within a 100-year flood hazard zone. A small flood hazard area is identified as Zone X and is located in a local depression adjacent to San Juan Grade Road where Santa Rita Creek flows next to the road, across from the Specific Plan Area. Flood conditions in Zone X ("Other Flooded Areas") are limited to less than one-foot depth during the 100-year event and/or are subject to flooding between the 100- and 500-year events. The extent of flooding is naturally limited by existing topography. Lands designated as Zone X are outside of the Special Flood Hazard Areas. Changes to land surfaces in these areas do not trigger map revisions and no flood insurance requirements are imposed on structures in these areas.

No other parts of the Specific Plan Area are designated as flood prone, and there are no impacts to regulatory floodways or Special Flood Hazard Areas (Zone A or AE) as defined by FEMA. Provided that the storm drain system and detention/retention facilities to be installed as part of the proposed development are adequately sized and properly installed and maintained, additional flooding will not be induced by the proposed project. Therefore, the WASP is not at risk of the 100-year flood.

However, future projects in the area could result in additional discharges of stormwater during storm events which, in theory, could lead to an incremental increase in peak stormwater runoff and potential increases in downstream flood elevations. However, the Monterey County Water Resources Agency (MCWRA) oversees the development and implementation of water quality, water supply, and flood control projects in Monterey County, including operation and maintenance of the Reclamation Ditch. The Reclamation Ditch is part of a complex drainage system within the lower Salinas Valley.

The MCWRA has imposed regulations for floodplains in the County. Pertinent regulations include the following:

1. Lands within the FEMA FIRM identified 100-year floodplain (Special Hazards Areas) and areas within 200 feet of a river or with 50 feet of a watercourse are subject to these regulations.
2. No construction is allowed within regulatory floodways or Zones AE.
3. Any encroachment into a regulatory floodway shall not result in any increase of base flood elevations.
4. New construction shall have the lowest floor, including basement, elevated to at least one foot above the base flood elevation.

Future development in the area must be sited and designed in accordance with the aforementioned MCWRA regulations. The WASP would not result in a cumulatively considerable contribution to any significant cumulative impacts as future projects would also be subject to the same regulatory limitations. Implementation of the proposed project would have a less than significant cumulative

impact relative to this environmental topic. As such, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to the potential for impacts related to flooding.

NOISE

The cumulative setting for noise impacts consists of the existing and future noise sources that could affect the Specific Plan Area or surrounding uses.

Impact 3.7-8: Cumulative exposure of existing and future noise-sensitive land uses to increased noise resulting from cumulative development (Cumulatively Considerable and Significant and Unavoidable)

As also provided in Section 3.7: Noise of this EIR, the following tables show the predicted traffic noise level increases on the local roadway network for Cumulative, Cumulative + Project, and Cumulative + Project + CASP conditions. Appendix F of this EIR provides the complete inputs and results of the FHWA traffic noise modeling.

TABLE 4.0-3: CUMULATIVE AND CUMULATIVE PLUS PROJECT TRAFFIC NOISE LEVELS

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		CUMULATIVE	CUMULATIVE + PROJECT	CHANGE	CRITERIA[1]	SIGNIFICANT ?
Constitution Blvd.	South of E. Boronda	62.2	64.7	2.5	+3 dB	No
E. Boronda Rd.	N. Main to San Juan Grade	66.5	67.9	1.3	+1.5 dB	No
E. Boronda Rd.	**San Juan Grade to McKinnon**	**65.3**	**67.7**	**2.4**	**+1.5 dB**	**Yes**
E. Boronda Rd.	McKinnon to El Dorado	64.4	65.9	1.4	+3 dB	No
E. Boronda Rd.	El Dorado to Natividad	64.1	67.0	2.9	+3 dB	No
E. Boronda Rd.	Natividad to Independence	66.6	68.0	1.4	+1.5 dB	No
E. Boronda Rd.	**Independence to Hemmingway**	**65.1**	**66.9**	**1.8**	**+1.5 dB**	**Yes**
E. Boronda Rd.	Hemmingway to Constitution	58.2	59.9	1.7	+5 dB or > 60 dB	No
E. Boronda Rd.	Constitution to N. Sanborn	60.6	63.0	2.4	+3 dB	No
E. Boronda Rd.	**N. Sanborn to Williams**	**59.6**	**62.0**	**2.4**	**+5 dB or > 60 dB**	**Yes**
El Dorado Dr.	South of E. Boronda	54.1	54.9	0.8	+5 dB or > 60 dB	No
Hemmingway Dr.	South of E. Boronda	54.8	54.8	0.0	+5 dB or > 60 dB	No
Independence Blvd.	South of E. Boronda	60.5	60.8	0.3	+3 dB	No
McKinnon St.	South of E. Boronda	63.6	65.2	1.6	+3 dB	No
N. Main	North of E. Boronda	69.7	69.7	0.0	+1.5 dB	No
N. Main	South of E. Boronda	66.8	66.9	0.0	+1.5 dB	No
N. Sanborn Rd.	South of E. Boronda	56.3	58.4	2.1	+5 dB or > 60 dB	No
Natividad Rd.	**South of E. Boronda**	**63.0**	**66.8**	**3.7**	**+3 dB**	**Yes**
Natividad Rd.	**E. Boronda to Future Russell Rd.**	**64.1**	**67.1**	**3.0**	**+3 dB**	**Yes**
Natividad Rd.	Future Russell Rd. to Rogge	64.1	64.3	0.2	+3 dB	No

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		CUMULATIVE	CUMULATIVE + PROJECT	CHANGE	CRITERIA[1]	SIGNIFICANT ?
Natividad Rd.	North of Rogge	62.0	62.3	0.3	+3 dB	No
Old Stage Rd.	North of Future Constitution	59.1	59.1	0.0	+5 dB or > 60 dB	No
Old Stage Rd.	Future Constitution to Williams	58.0	58.0	0.0	+5 dB or > 60 dB	No
Old Stage Rd.	South of Williams	56.2	56.2	0.0	+5 dB or > 60 dB	No
Rogge Rd.	San Juan Grade to Natividad	61.7	61.7	0.0	+3 dB	No
Russell Rd.	West of San Juan Grade	67.5	68.7	1.2	+1.5 dB	No
San Juan Grade Rd.	South of E. Boronda	65.8	66.7	0.8	+1.5 dB	No
San Juan Grade Rd.	E. Boronda to Van Buren	69.3	69.5	0.2	+1.5 dB	No
San Juan Grade Rd.	Van Buren to Russell	69.0	69.3	0.3	+1.5 dB	No
San Juan Grade Rd.	Russell to Rogge	66.0	66.5	0.5	+1.5 dB	No
San Juan Grade Rd.	North of Rogge	63.1	63.8	0.7	+3 dB	No
Van Buren Ave.	West of San Juan Grade	57.3	57.3	0.0	+5 dB or > 60 dB	No
Williams Rd.	West of E. Boronda	64.6	66.2	1.6	+3 dB	No
Williams Rd.	East of E. Boronda	51.7	51.7	0.0	+5 dB or > 60 dB	No

NOTE: [1] WHERE EXISTING NOISE LEVELS ARE LESS THAN 60 DB AN INCREASE OF 5 DB WOULD BE A SIGNIFICANT INCREASE. ADDITIONALLY, ANY INCREASE CAUSING NOISE LEVELS TO EXCEED THE CITY'S NORMALLY ACCEPTABLE 60 DB LDN NOISE LEVEL STANDARD AT AN EXISTING OUTDOOR ACTIVITY AREA OF A RESIDENTIAL USE WOULD ALSO BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 60 DB BUT ARE LESS THAN 65 DB, AN INCREASE OF 3 DB OR MORE WOULD BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 65 DB, AN INCREASE OF 1.5 DB OR MORE WOULD BE SIGNIFICANT. ***BOLD*** *TEXT INDICATES UNACCEPTABLE NOISE INCREASE.*

SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2016.

TABLE 4.0-4: CUMULATIVE AND CUMULATIVE PLUS PROJECT + CASP TRAFFIC NOISE LEVELS

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		CUMULATIVE	CUMULATIVE + PROJECT + CASP	CHANGE	CRITERIA[1]	SIGNIFICANT?
Constitution Blvd.	**South of E. Boronda**	**62.2**	**65.7**	**3.5**	**+3 dB**	**Yes**
E. Boronda Rd.	**N. Main to San Juan Grade**	**66.5**	**68.1**	**1.5**	**+1.5 dB**	**Yes**
E. Boronda Rd.	**San Juan Grade to McKinnon**	**65.3**	**67.9**	**2.6**	**+1.5 dB**	**Yes**
E. Boronda Rd.	McKinnon to El Dorado	64.4	66.1	1.7	+3 dB	No
E. Boronda Rd.	**El Dorado to Natividad**	**64.1**	**67.4**	**3.3**	**+3 dB**	**Yes**
E. Boronda Rd.	**Natividad to Independence**	**66.6**	**69.3**	**2.6**	**+1.5 dB**	**Yes**
E. Boronda Rd.	**Independence to Hemmingway**	**65.1**	**68.6**	**3.5**	**+1.5 dB**	**Yes**
E. Boronda Rd.	**Hemmingway to Constitution**	**58.2**	**61.3**	**3.0**	**+5 dB or > 60 dB**	**Yes**
E. Boronda Rd.	Constitution to N. Sanborn	60.6	63.8	3.2	+3 dB	No
E. Boronda Rd.	**N. Sanborn to Williams**	**59.6**	**62.7**	**3.1**	**+5 dB or > 60 dB**	**Yes**

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		CUMULATIVE	CUMULATIVE + PROJECT + CASP	CHANGE	CRITERIA[1]	SIGNIFICANT?
El Dorado Dr.	South of E. Boronda	54.1	54.9	0.8	+5 dB or > 60 dB	No
Hemmingway Dr.	South of E. Boronda	54.8	58.8	4.0	+5 dB or > 60 dB	No
Independence Blvd.	South of E. Boronda	60.5	62.1	1.6	+3 dB	No
McKinnon St.	South of E. Boronda	63.6	65.3	1.7	+3 dB	No
N. Main	North of E. Boronda	69.7	69.7	0.0	+1.5 dB	No
N. Main	South of E. Boronda	66.8	67.0	0.2	+1.5 dB	No
N. Sanborn Rd.	South of E. Boronda	56.3	58.9	2.6	+5 dB or > 60 dB	No
Natividad Rd.	**South of E. Boronda**	**63.0**	**67.5**	**4.5**	**+3 dB**	**Yes**
Natividad Rd.	**E. Boronda to Future Russell Rd.**	**64.1**	**67.9**	**3.8**	**+3 dB**	**Yes**
Natividad Rd.	Future Russell Rd. to Rogge	64.1	64.9	0.8	+3 dB	No
Natividad Rd.	North of Rogge	62.0	63.0	1.1	+3 dB	No
Old Stage Rd.	North of Future Constitution	59.1	59.8	0.7	+5 dB or > 60 dB	No
Old Stage Rd.	Future Constitution to Williams	58.0	58.7	0.7	+5 dB or > 60 dB	No
Old Stage Rd.	South of Williams	56.2	57.2	1.0	+5 dB or > 60 dB	No
Rogge Rd.	San Juan Grade to Natividad	61.7	61.7	0.0	+3 dB	No
Russell Rd.	**West of San Juan Grade**	**67.5**	**69.4**	**1.9**	**+1.5 dB**	**Yes**
San Juan Grade Rd.	South of E. Boronda	65.8	66.9	1.1	+1.5 dB	No
San Juan Grade Rd.	E. Boronda to Van Buren	69.3	69.5	0.2	+1.5 dB	No
San Juan Grade Rd.	Van Buren to Russell	69.0	69.3	0.3	+1.5 dB	No
San Juan Grade Rd.	Russell to Rogge	66.0	66.5	0.5	+1.5 dB	No
San Juan Grade Rd.	North of Rogge	63.1	63.8	0.7	+3 dB	No
Van Buren Ave.	West of San Juan Grade	57.3	57.3	0.0	+5 dB or > 60 dB	No
Williams Rd.	West of E. Boronda	64.6	66.8	2.2	+3 dB	No
Williams Rd.	East of E. Boronda	51.7	51.8	0.1	+5 dB or > 60 dB	No

NOTE: [1] WHERE EXISTING NOISE LEVELS ARE LESS THAN 60 DB AN INCREASE OF 5 DB WOULD BE A SIGNIFICANT INCREASE. ADDITIONALLY, ANY INCREASE CAUSING NOISE LEVELS TO EXCEED THE CITY'S NORMALLY ACCEPTABLE 60 DB LDN NOISE LEVEL STANDARD AT AN EXISTING OUTDOOR ACTIVITY AREA OF A RESIDENTIAL USE WOULD ALSO BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 60 DB BUT ARE LESS THAN 65 DB, AN INCREASE OF 3 DB OR MORE WOULD BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 65 DB, AN INCREASE OF 1.5 DB OR MORE WOULD BE SIGNIFICANT. ***BOLD*** *TEXT INDICATES UNACCEPTABLE NOISE INCREASE.*

SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2016.

As shown in the above tables, some noise-sensitive receptors located along the Plan Area roadways are currently exposed to exterior traffic noise levels exceeding the City of Salinas 60 dB L_{dn} exterior noise level standard for residential uses. These receptors would continue to experience elevated exterior noise levels with implementation of the proposed project.

In some locations, the proposed project is predicted to cause increases in traffic noise levels which would trigger a new exceedance of the City of Salinas' 60 dB L_{dn} exterior noise level standard at sensitive receptor locations, or exceed the FICON allowable increase criteria outlined in Table 3.7-7 (as provided in Section 3.7: Noise in this EIR). The greatest number of significant traffic noise increases would occur under the Cumulative + Project + CASP traffic condition.

Significant traffic noise increases under the Cumulative + Project + CASP traffic condition include the following:

- Constitution Blvd., South of E. Boronda – noise levels are predicted to increase by 3.5 dB from 62.2 dB to 65.7 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Main to San Juan Grade – noise levels are predicted to increase by 1.5 dB from 66.5 dB to 68.1 dB L_{dn}. This would equal the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, San Juan Grade to McKinnon – noise levels are predicted to increase by 2.6 dB from 65.3 dB to 67.9 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, El Dorado to Natividad – noise levels are predicted to increase by 3.3 dB from 64.1 dB to 66.1 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Natividad to Independence – noise levels are predicted to increase by 2.6 dB from 66.6 dB to 69.3 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Independence to Hemmingway – noise levels are predicted to increase by 3.5 dB from 65.1 dB to 68.6 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Hemmingway to Constitution – noise levels are predicted to increase by 3.0 dB from 58.2 dB to 61.3 dB L_{dn}. This would not exceed the FICON criteria of 5 dB where existing noise levels are less than 60 dB, as outlined in Table 3.7-7, but would cause a new exceedance of the City's 60 dB L_{dn} exterior noise level standard at outdoor activity areas of the nearest residential receptors.
- E. Boronda Road, N. Sanborn to Williams – noise levels are predicted to increase by 3.1 dB from 59.6 dB to 62.7dB L_{dn}. This would not exceed the FICON criteria of 5 dB where existing noise levels are less than 60 dB, as outlined in Table 3.7-7, but would cause a new exceedance of the City's 60 dB L_{dn} exterior noise level standard at outdoor activity areas of the nearest residential receptors.
- Natividad Road., South of E. Boronda – noise levels are predicted to increase by 4.5 dB from 63.0 dB to 67.5 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7.
- Natividad Road., E. Boronda to Future Russell Road – noise levels are predicted to increase by 3.8 dB from 63.0 dB to 67.5 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7. However, it

should be noted that this roadway segment is located between the WASP and CASP projects and future sensitive receptors along this roadway would be constructed with noise control measures designed to achieve compliance with the City of Salinas exterior and interior noise level standards.

- Russell Road, West of San Juan Grade – noise levels are predicted to increase by 1.9 dB from 67.5 dB to 69.4 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.

The proposed project would cause increased noise levels exceeding the City of Salinas 60 dB L_{dn} exterior noise level standard at existing residential receptors. Therefore, there would be a cumulative exposure of existing and future noise-sensitive land uses to increased noise resulting from cumulative development. As such, implementation of the WASP would have a ***cumulatively considerable contribution*** and ***significant and unavoidable*** impact to noise.

POPULATION AND HOUSING

The cumulative setting for population and housing includes the Plan Area and the greater Monterey region.

Impact 3.8-2: Cumulative impact on the potential to induce substantial population growth in an area (Less than Significant and Less than Cumulatively Considerable)

Continued development in Salinas and Monterey County will result in housing unit and population increases in the region. Future development according to the land uses identified in the Salinas General Plan will result in a population growth of approximately 69,300 people in the City between the years of 2000 and buildout of the General Plan. Based on the growth projected to occur in the planning area, the General Plan FEIR concluded a potentially significant impact associated with substantial growth is anticipated. However, the General Plan FEIR concluded that implementation of the mitigation measures contained in the FEIR would reduce the population and housing impacts created by implementation of the General Plan to a less than significant level. As discussed within Section 3.8: Population and Housing (under impact 3.8-1), mitigation measures identified in the General Plan FEIR would continue to apply to the implementation of the proposed project.

Development of the FGAs is a component of the City's planned long-term growth as identified in the City's General Plan. Infrastructure needed to support development of the site and the FGAs, and the subsequent population, housing and employment increases expected through implementation of the WASP, have already been planned and evaluated. Additionally, all lands within the General Plan jurisdiction have been planned to accommodate growth within the city have been evaluated in the General Plan FEIR. The proposed project does not change the intent, intensities, or densities of land uses identified within the General Plan, therefore, development of the Specific Plan Area will not induce growth in the Specific Plan Area, adjacent undeveloped parcels, or within the City of Salinas that has not already been accounted for in the General Plan, and evaluated for environmental impacts by the city in the General Plan Final Program EIR. In addition, implementation the Salinas EDE would not result in the development of new housing. As such, implementation of the proposed

project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to impacts to population and housing.

PUBLIC SERVICES

The Cumulative setting would include all areas covered in the service areas of the City of Salinas Police Department, City of Salinas Fire Department, City of Salinas Recreation and Community Services Department, the Santa Rita Union School District, Salinas Union High School District, and the Salinas Public Library System.

Impact 3.9-6: Under cumulative conditions the proposed project may result in effects on public facilities (Less than Significant and Less than Cumulatively Considerable)

Under cumulative conditions future local and regional growth will result in increased demand for schools, police protection, fire protection, and library services. The City and its associated service providers must continue to evaluate the levels of service desired and the funding sources available to meet increases in demand.

The 2002 General Plan Final Program EIR analyzed impacts to public services (including police protection, fire and emergency services, schools, and libraries), and found that General Plan policies addressed the public services needs of future development resulting from implementation of the General Plan. The specific environmental impact of constructing new facilities could not be determined at the time, but the Final Program EIR found that construction and operation of such facilities could potentially cause significant impacts. These potential impacts, however, were addressed by the General Plan policies and mitigation measures included in Sections 5.1 through 5.12 of the Salinas General Plan Final Program EIR.[1]

The impact fees developed and reviewed by the City will recover future development's proportionate share of capital asset costs. Fees, as applied only to new development, represent future development's proportionate share of public services and facilities capital costs.

However, while new development will avoid project level impacts associated with service ratios to the extent allowed by the associated impact fees, there are existing deficiencies with regard to library services that will need to be addressed by the City in order to meet service goals set forth by the General Plan. It is important to note that impact fees may not be used to correct existing deficiencies but may be used to pay for increased demand for public facilities or increased demand upon existing capital facilities provided that those facilities are needed to serve additional development and have the capacity to do so, given relevant level-of-service standards.

As described previously, the Salinas General Plan Final Program EIR found that construction and operation of future public facilities could potentially cause significant impacts. These potential impacts, however, were addressed by the General Plan policies and mitigation measures included

[1] Sphere of Influence Amendment and Annexation Initial Study, August 2007

in Sections 5.1 through 5.12 of the General Plan Final Program EIR. Project-specific information is currently unknown for future facilities, however, all individual future projects will be required to be reviewed under CEQA. The proposed project and future projects within the FGA's are required to pay all applicable impact fees. Additionally, ongoing revenues that would come from property taxes, sales taxes, and other revenues generated by the proposed project, would fund services and facility improvements throughout the city. The proposed project would contribute its fair share based on project impacts, and includes additional park space over what is required to meet the General Plan's goal of three acres per 1000 residents. Therefore, the provisions of services and facilities contained within the Specific Plan Area and the payment of all applicable impact fees would ensure that the proposed project's share of impacts to public facilities under cumulative conditions are less than significant**.** As such, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution on impacts to public services.

TRANSPORTATION AND CIRCULATION

The cumulative setting for transportation and circulation includes the Plan Area and the traffic facilities affected by the development of the proposed project.

Impact 3.10-9: Under cumulative conditions, project implementation would exacerbate levels of service at various facilities within the study (Cumulatively Considerable and Significant and Unavoidable)

Project Plus Cumulative Conditions: As shown in Table 3.10-20 (as contained within Section 3.10: Transportation and Circulation), implementation of the Specific Plan would result in unacceptable operation at seventeen of the study intersections, and four of the freeway segments, under the cumulative Plus Project scenario. The reductions in automobile LOS attributable to the WASP under the cumulative scenario include the following intersections:

- U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road (#1): LOS F during the PM peak hour
- U.S. 101 Northbound Ramps/Crazy Horse Canyon Road (#2): LOS F during the PM peak hour
- Crazy Horse Canyon Road/San Juan Grade Road (#5): LOS F during the PM peak hour
- Hebert Road/San Juan Grade Road (#6): LOS E during the PM peak hour
- Natividad Road/Rogge Road (#12): LOS F during the PM peak hour
- Natividad Road/Russell Road (#13): LOS during both peak hours
- San Juan Grade Road/Van Buren Avenue (#14): LOS F during both peak hours
- North Main Street/Boronda Road (#17): LOS F during the PM peak hour
- North Main Street/West Laurel Drive (#32): LOS F during the PM peak hour
- Natividad Road/East Laurel Drive (#33): LOS F during both peak hours
- Constitution Boulevard/East Laurel Drive (#34): LOS E during the PM peak hour
- Old Stage Road/Williams Road/Private Road (#36): LOS F during both peak hours
- North Main Street/East Bernal Drive (#37): LOS E during both peak hours

- Sherwood Drive/Natividad Road/East Bernal Drive/La Posada Way (#38): LOS F during both peak hours
- South Davis Road/Blanco Road (#53): LOS F during both peak hours
- Salinas Street/North Main Street/West Market Street/East Market Street (#55): LOS F during both peak hours

In addition, reductions in automobile LOS attributable to the WASP under the cumulative scenario would occur at the following freeway segments:

- San Juan Road to Crazy Horse Canyon Road (southbound): LOS F during the PM peak hour
- San Miguel Canyon Road to SR 156:
    - Northbound: LOS E during both peak hours
    - Southbound: LOS F during both peak hours
- SR 156 to Sala Road (southbound): LOS F during the PM peak hour

With implementation of the mitigation measures provided within Section 3.10: Transportation and Circulation, operation at all seventeen of the affected intersections and each of the freeway segments would be improved. However, even with implementation of these mitigation measures, some of the affected facilities would remain above the applicable threshold.

Project Plus Cumulative with CASP Conditions: As shown in Table 3.10-25 (as contained within Section 3.10: Transportation and Circulation), implementation of the Specific Plan would result in unacceptable operation at twenty-two of the study intersections, and four of the freeway segments, under the cumulative Plus Project with CASP scenario. A This would be a ***potentially significant*** impact.

The reductions in automobile LOS attributable to WASP with CASP under the cumulative scenario include the following intersections:

- U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road (#1): LOS F during the PM peak hour
- U.S. 101 Northbound Ramps/Crazy Horse Canyon Road (#2): LOS F during the PM peak hour
- Crazy Horse Canyon Road/San Juan Grade Road (#5): LOS F during the PM peak hour
- Hebert Road/San Juan Grade Road (#6): LOS E during the PM peak hour
- Old Stage Road/Herbert Road (#7): LOS E during PM peak hour
- Natividad Road/Rogge Road (#12): LOS F during the PM peak hour
- Natividad Road/Russell Road (#13): LOS F during both peak hours
- San Juan Grade Road/Van Buren Avenue (#14): LOS F during both peak hours
- North Main Street/Boronda Road (#17): LOS F during the PM peak hour
- Natividad Road/Boronda Road (#22): LOS F during PM peak hour
- North Main Street/West Laurel Drive (#32): LOS F during the PM peak hour
- Natividad Road/East Laurel Drive (#33): LOS F during both peak hours
- Constitution Boulevard/East Laurel Drive (#34): LOS F during both peak hours

- North Sanborn Road/Boronda Road (#35): LOS F during PM peak hour
- Old Stage Road/Williams Road/Private Road (#36): LOS F during both peak hours
- North Main Street/East Bernal Drive (#37): LOS E during both peak hours
- Sherwood Drive/Natividad Road/East Bernal Drive/La Posada Way (#38): LOS F during both peak hours
- Williams Road/East Boronda Road (#40): LOS F During PM peak hour
- East Front Street/Sherwood Drive/Market Street (#51): LOS E during PM peak hour
- South Davis Road/Blanco Road (#53): LOS F during both peak hours
- Salinas Street/North Main Street/West Market Street/East Market Street (#55): LOS F during both peak hours
- South Main Street/West Blanco Road/East Blanco Road (#56): LOS E during PM peak hour

In addition, reductions in automobile LOS attributable to the WASP with CASP under the cumulative scenario would occur at the following freeway segments:

- San Juan Road to Crazy Horse Canyon Road (southbound): LOS F during the PM peak hour
- San Miguel Canyon Road to SR 156:
    - Northbound: LOS E during AM peak hour and LOS F during PM peak hour
    - Southbound: LOS E during AM peak hour and LOS F during PM peak hour
- SR 156 to Sala Road (southbound): LOS F during the PM peak hour

With implementation of the mitigation measures provided within Section 3.10: Transportation and Circulation, operation at all twenty-two of the affected intersections and each of the freeway segments would be improved. However, even with implementation of these mitigation measures, some of the affected facilities would remain above the applicable threshold.

Conclusion: Due to the fact that implementation of the WASP under both cumulative conditions would cause some affected facilities to remain as significant and unavoidable impacts, implementation of the proposed project would have a ***cumulatively considerable*** and ***significant and unavoidable*** contribution to traffic.

UTILITIES

The cumulative setting would include all areas covered in the service areas of the City's wastewater system, water system, and stormwater system, as well as solid waste pickup services. Under General Plan buildout (including the new EDE) conditions, the City would see an increased demand for water service, sewer service, solid waste disposal services, and stormwater infrastructure needs.

Impact 3.11-4: Cumulative impact on wastewater utilities (Less than Significant and Less than Cumulatively Considerable)

The cumulative setting for utilities includes the city of Salinas, the growth projections included in the City of Salinas General Plan, the General Plan Final EIR, and the most recent City of Salinas Economic Development Element. Under the combined General Plan/General Plan EIR and Economic

Development Element buildout conditions, the City of Salinas would see an increased demand for wastewater and sewer services.

The proposed project would not exceed the RWQCB wastewater treatment requirements or cause a significant impact related to the construction of new wastewater treatment or collection facilities or expansion of existing facilities. There is sufficient capacity at the Regional Treatment Plant to serve the proposed project.

The City requires each project applicant to secure adequate wastewater treatment capacity. The project proponent is required to provide the City with documentation of a will-serve or other commitment from the agency providing wastewater treatment. Additionally, the project proponent would be required to install/connect the necessary collection/transmission infrastructure to ensure the appropriate treatment of all wastewater.

The City of Salinas projects an increase of total wastewater discharge to a maximum of approximately 22.1 MGD at full buildout of the entire General Plan Sphere of Influence (SOI). Wastewater demand for the buildout of the most recent version of the Economic Development Element would add approximately 1.6 MGD to this total, which would increase the total cumulative demand at the Regional Treatment Plant to approximately 23.7 MGD. The wastewater capacity at the Regional Treatment Plant is 29.6 MGD, which provides 6.2 MGD in excess capacity. Therefore, the proposed project, in combination with buildout of the city's Sphere of Influence and the city's Economic Development Element, would generate *a* ***less than significant*** and ***less than cumulatively considerable*** impact on wastewater utilities.

Impact 3.11-7: Cumulative impact on water utilities (Less than Significant and Less than Cumulatively Considerable)

Under the combined General Plan/General Plan EIR and Economic Development Element buildout conditions, the City of Salinas would see an increased demand for water services. There are available water supplies to serve the proposed project from existing entitlements and resources. Additionally, the proposed project would not cause a significant impact related to the construction of the water system. Buildout of the General Plan and most recent City of Salinas Economic Development Element would add additional demand. Water demand for buildout of the entire City of Salinas Sphere of Influence (inclusive of the proposed project and all existing development within the City of Salinas) would be approximately 43,309.3 AFY. Additionally, water demand for buildout of the Economic Development Element would require an additional 1,972.3 AFY. Combined, the cumulative scenario would require a total of 45,281.6 AFY, which is within the available supply of 47,333 AFY expected by 2035 under multiple dry-year conditions.

TABLE 3.11-13: SALINAS BUILDOUT CONDITIONS WATER GENERATION ESTIMATE [1]

USE	*CALCULATION [1]*	*ACRE FEET PER*
GENERAL PLAN/GENERAL PLAN EIR BUILDOUT CONDITIONS		
Retail/Services	56,053,000 s.f. @ 0.335 gal/s.f./day[2] = 18,777,755 gpd[2]	21,033.6
Residential	87.57 gal/resident @ 3.67 residents/unit = 321.4 gal/unit/day	20,900.5
Schools	310.22 acres @ 3,500 gal/acre/day = 318,325 gpd	1,216.2
Parks	63.61 acres @ 2,232 gal/acre/day = 141,985 gpd	159.0
ECONOMIC DEVELOPMENT ELEMENT		
Retail/Services	5,255,959 s.f. @ 0.335 gal/s.f./day = 1,760,746 gpd	1,972.3
TOTAL		**45,281.6**

[1] Calculations in this table are derived from water demand estimates from the Final Supplement for the Salinas General Plan Program EIR, Appendix E, Water Supply Assessment – Cal Water.
[2] Gallons per day

There would be sufficient water resources available to provide supply for buildout of the cumulative scenario. Therefore, this would result in a ***less than significant*** and a ***less than cumulatively considerable*** impact on water utilities.

Impact 3.11-9: Cumulative impact on stormwater facilities (Less than Significant and Less than Cumulatively Considerable)

No portion of the Specific Plan Area is located within a 100-year flood hazard zone. A small flood hazard area is identified as Zone X and is located in a local depression adjacent to San Juan Grade Road where Santa Rita Creek flows next to the road, across from the Specific Plan Area. Flood conditions in Zone X ("Other Flooded Areas") are limited to less than one-foot depth during the 100-year event and/or are subject to flooding between the 100- and 500-year events. The extent of flooding is naturally limited by existing topography. Lands designated as Zone X are outside of the Special Flood Hazard Areas. Changes to land surfaces in these areas do not trigger map revisions and no flood insurance requirements are imposed on structures in these areas.

No other parts of the Specific Plan Area are designated as flood prone, and there are no impacts to regulatory floodways or Special Flood Hazard Areas (Zone A or AE) as defined by FEMA. Provided that the storm drain system and detention/retention facilities to be installed as part of the proposed development are adequately sized and properly installed and maintained, additional flooding will not be induced by the proposed project.

Future projects in the area could result in additional discharges of stormwater during storm events which, in theory, could lead to an incremental increase in peak stormwater runoff and potential increases in downstream flood elevations. The Monterey County Water Resources Agency (MCWRA) oversees the development and implementation of water quality, water supply, and flood control projects in Monterey County, including operation and maintenance of the Reclamation Ditch. The Reclamation Ditch is part of a complex drainage system within the lower Salinas Valley.

The MCWRA has imposed regulations for floodplains in the County. Pertinent regulations include the following:

1. Lands within the FEMA FIRM identified 100-year floodplain (Special Hazards Areas) and areas within 200 feet of a river or with 50 feet of a watercourse are subject to these regulations.
2. No construction is allowed within regulatory floodways or Zones AE.
3. Any encroachment into a regulatory floodway shall not result in any increase of base flood elevations.
4. New construction shall have the lowest floor, including basement, elevated to at least one foot above the base flood elevation.

Future development in the area must be sited and designed in accordance with the aforementioned MCWRA regulations. The WASP would not result in a cumulatively considerable contribution to any significant cumulative impacts as future projects would also be subject to the same regulatory limitations.

The WASP would increase the amount of impervious surfaces in the Plan Area, which could increase peak stormwater runoff rates and volumes on and downstream. The WASP includes an extensive system of on-site stormwater collection, treatment and retention facilities to accommodate the increased stormwater flows that would originate in the Specific Plan Area.

Surface runoff from the area will be managed via detention/retention basins and flow reducing Best Management Practices (BMPs) to prevent local flooding within the site. These features will also reduce peak flows from the Specific Plan Area to receiving creeks and storm drains to amounts less than such flows under existing conditions.

The proposed development, including water quality BMPs, detention basins, and retention basins, is designed to minimize or eliminate increases in runoff from these new impervious surfaces entering surface water courses and storm drains. The stormwater runoff calculations completed as part of the Hydrology and Water Quality Technical Study indicate that peak runoff and total volume of runoff will be minimized by the proposed development storm drainage design which retains water to the maximum extent possible.

With the design and construction of flood control improvements, the WASP would not increase peak stormwater runoff. Implementation of the proposed project would have a less than significant cumulative impact relative to this environmental topic. As such, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to stormwater runoff.

Impact 3.11-11: Cumulative impact on solid waste facilities (Less than Significant and Less than Cumulatively Considerable)

Solid waste generated in the City is disposed at the Johnson Canyon Landfill. This landfill is permitted through the year 2040. The permitted maximum disposal at the Johnson Canyon Landfill is 1,574 tons per day. Currently, the average daily disposal is approximately 573 tons per day. The total permitted capacity of the landfill is 6.9 million cubic yards.

The region is expected to add numerous developments through 2035. The Central Area Specific Plan, East Area Specific Plan, and the EDE are three such areas. These new areas would generate an estimated 75 to 100 tons per day at total buildout. In addition, other jurisdictions within the region are likely to generate new sources of solid waste that would need to be processed at the landfill. Nevertheless, the Johnson Canyon Landfill has the capacity to serve nearly three times as much waste per day as it does currently. Implementation of the proposed project would have a less than significant cumulative impact relative to this environmental topic. Therefore, this would result in a ***less than significant*** and a ***less than cumulatively considerable*** impact on solid waste facilities.

4.2 SIGNIFICANT IRREVERSIBLE EFFECTS

LEGAL CONSIDERATIONS

CEQA Section 15126.2(c) and Public Resources Code Sections 21100(b)(2) and 21100.1(a), requires that the EIR include a discussion of significant irreversible environmental changes which would be involved in the proposed action should it be implemented. Irreversible environmental effects are described as:

- The project would involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of a project would generally commit future generations to similar uses (e.g., a highway provides access to previously remote area);
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The phasing of the proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Determining whether the proposed project would result in significant irreversible effects requires a determination of whether key resources would be degraded or destroyed such that there would be little possibility of restoring them. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Analysis

Implementation of the WASP would result in the conversion of approximately 797 acres of land currently used primarily for agricultural uses for the development of residential, mixed use commercial, community park, neighborhood park, small park and open space facilities. Development of the WASP would constitute a long-term commitment to these uses. It is unlikely that circumstances would arise that would justify the return of the land to its original condition as agricultural land.

A variety of resources, including land, energy, water, construction materials, and human resources would be irretrievably committed for the initial construction, infrastructure installation and connection to existing utilities, and its continued maintenance. Construction of the WASP would

require the commitment of a variety of other non-renewable or slowly renewable natural resources such as lumber and other forest products, sand and gravel, asphalt, petrochemicals, and metals.

Additionally, a variety of resources would be committed to the ongoing operation and life of the WASP. The introduction of commercial and industrial to the Plan Area will result in an increase in area traffic over existing conditions. Fossil fuels are the principal source of energy and the WASP would increase consumption of available supplies, including gasoline and diesel. These energy resource demands relate to initial project construction, project operation and site maintenance and the transport of people and goods to and from the Plan Area.

4.3 SIGNIFICANT AND UNAVOIDABLE IMPACTS

CEQA Guidelines Section 15126.2(b) requires an EIR to discuss unavoidable significant environmental effects, including those that can be mitigated but not reduced to a level of insignificance. The following significant and unavoidable impacts of the proposed project are discussed in Chapters 3.1 through 3.11 and previously in this chapter (cumulative-level). Refer to those discussions for further details and analysis of the significant and unavoidable impact identified below:

- Impact 3.1-1: The project has the potential to conflict with or obstruct implementation of the applicable air quality plan.
- Impact 3.1-2: Project operation has the potential to cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation.
- Impact 3.1-7: Cumulative impact on the region's air quality.
- Impact 3.2-9: The proposed project has the potential to interfere with the movement of native fish or wildlife species or with established wildlife corridors, or impede the use of native wildlife nursery sites.
- Impact 3.2-12: Cumulative loss of biological resources including habitats and special status species.
- Impact 3.4-1: Potential to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- Impact 3.4-2: Potential to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.
- Impact 3.4-4: Cumulative Impact on climate change from increased project-related greenhouse gas emissions.
- Impact 3.7-1: The proposed project has the potential to increase traffic noise levels at existing receptors.
- Impact 3.7-8: Cumulative exposure of existing and future noise-sensitive land uses to increased noise resulting from cumulative development.

- Impact 3.10-3: Under Cumulative Plus Project conditions, implementation of the proposed Specific Plan may conflict with the performance measures established by the City of Salinas, Monterey County, and Caltrans.
- Impact 3.10-4: Under Cumulative Plus Project with Central Area Specific Plan conditions, implementation of the proposed Specific Plan may conflict with the performance measures established by the City of Salinas, Monterey County, and Caltrans.

5.1 CEQA REQUIREMENTS

CEQA requires that an EIR analyze a reasonable range of feasible alternatives that meet most or all project objectives while reducing or avoiding one or more significant environmental effects of the project. The range of alternatives required in an EIR is governed by a "rule of reason" that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice (CEQA Guidelines Section 15126.6[f]). Where a potential alternative was examined but not chosen as one of the range of alternatives, the CEQA Guidelines require that the EIR briefly discuss the reasons the alternative was dismissed.

Alternatives that are evaluated in the EIR must be potentially feasible alternatives. However, not all possible alternatives need to be analyzed. An EIR must "set forth only those alternatives necessary to permit a reasoned choice." (CEQA Guidelines, Section 15126.6(f).) The CEQA Guidelines provide a definition for a "range of reasonable alternatives" and, thus limit the number and type of alternatives that need to be evaluated in an EIR.

First and foremost, alternatives in an EIR must be potentially feasible. In the context of CEQA, "feasible" is defined as:

> *… capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.* (CEQA Guidelines 15364)

The inclusion of an alternative in an EIR is not evidence that it is feasible as a matter of law, but rather reflects the judgment of lead agency staff that the alternative is potentially feasible. The final determination of feasibility will be made by the lead agency decision-making body through the adoption of CEQA Findings at the time of action on the Project. (Mira Mar Mobile Community v. City of Oceanside (2004) 119 Cal.App.4th 477, 489 see also CEQA Guidelines, §§ 15091(a)) (3)(findings requirement, where alternatives can be rejected as infeasible); 15126.6 ([an EIR] must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation"). The following factors may be taken into consideration in the assessment of the feasibility of alternatives: site suitability, economic viability, availability of infrastructure, general plan consistency, other plan or regulatory limitations, jurisdictional boundaries, and the ability of the proponent to attain site control (Section 15126.6 (f) (1)).

Equally important to attaining the project objectives is the reduction of some or all significant impacts, particularly those that could not be mitigated to a less-than-significant level. The following significant and unavoidable impacts of the West Area Specific Plan Project are discussed throughout the individual EIR sections:

- Impact 3.1-1: The project has the potential to conflict with or obstruct implementation of the applicable air quality plan.
- Impact 3.1-2: Project operation has the potential to cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation.

- Impact 3.1-7: Cumulative impact on the region's air quality.
- Impact 3.2-9: The proposed project has the potential to interfere with the movement of native fish or wildlife species or with established wildlife corridors, or impede the use of native wildlife nursery sites.
- Impact 3.2-12: Cumulative loss of biological resources including habitats and special status species.
- Impact 3.4-1: Potential to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- Impact 3.4-2: Potential to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.
- Impact 3.4-4: Cumulative Impact on climate change from increased project-related greenhouse gas emissions.
- Impact 3.7-1: The proposed project has the potential to increase traffic noise levels at existing receptors.
- Impact 3.7-8: Cumulative exposure of existing and future noise-sensitive land uses to increased noise resulting from cumulative development.
- Impact 3.10-3: Under Cumulative Plus Project conditions, implementation of the proposed Specific Plan may conflict with the performance measures established by the City of Salinas, Monterey County, and Caltrans.
- Impact 3.10-4: Under Cumulative Plus Project with Central Area Specific Plan conditions, implementation of the proposed Specific Plan may conflict with the performance measures established by the City of Salinas, Monterey County, and Caltrans.

PROJECT OBJECTIVES

The principal objective of the proposed project is the approval and subsequent implementation of the proposed West Area Specific Plan and related entitlements. Proposed land uses in the 797-acre Specific Plan Area include residential, mixed use commercial, community park, neighborhood parks, small parks and open space (including supplemental storm water detention/retention basins). Implementation will involve development of the site under the New Urbanism Zoning districts of Neighborhood Edge (NE)/Low Density Residential, Neighborhood General 1 (NG-1)/Low/medium Density Residential, Neighborhood General 2 (NG-2)/High Density Residential, Village Center (VC) as well as the Public and Semipublic (PS), Parks (P), and Open Space (OS) zoning districts. A Specific Plan Overlay district will also apply to each zoning districts. These Zoning Districts are further described below.

The quantifiable objectives of the proposed project include the development of up to 4,340 residential dwelling units (with a minimum of 3,553 required under the General Plan), up to 571,500 square feet of commercial/mixed use building area, and up to 177 acres of public facilities

(including three elementary schools, a high school, middle school, supplemental detention/retention basins and 11 parks).

The Specific Plan includes goals, which are a description of some desired future condition, as a basis for objectives, policies, implementation measures, and other tools used for achieving the goals. The goals for the Specific Plan are based on the Salinas General Plan, especially as it applies to the FGA and the principles of New Urbanism developed by the City. The design principles of Crime Prevention through Environmental Design (CPTED), Health in all Policies, Smart Growth and Green building/streets are also included to promote the creation of a vibrant, healthy, walkable, safe and sustainable community. The City's National Pollutant Discharge Elimination System (NPDES) Permit, Storm Water Development Standards (SWDA) and Storm Water Standard Plans (SWSP) are also addressed in the design. The specific goals are to:

1. Create a community with a compact form that promotes sustainable neighborhood design and is pedestrian, bicycle, and transit friendly.
2. Provide a variety of land uses in easy walking distance of housing including a mixed use village, parks, and schools to reduce vehicle miles travelled.
3. Provide parks and other public green space in accordance with General Plan standards that are designed to be safe and easily accessible to residents.
4. Provide public services and infrastructure improvements that achieve and maintain City service standards.
5. Provide an inviting tree-lined street system which incorporates traffic calming and other measures.
6. Establish an interconnected sidewalk/pathway and open space system throughout the development which links to the greater North of Boronda FGA and the City as a whole.
7. Create a sense of place and unique identity through the use of entry treatments, landscaping, streetscapes, public art, decorative street lighting, pedestrian amenities and other elements.

The alternatives to the proposed project selected for analysis in the EIR were developed to minimize significant environmental impacts while fulfilling the basic objectives of the project

5.2 ALTERNATIVES CONSIDERED IN THIS EIR

Four alternatives to the proposed project were developed based on input from City staff, the public during the NOP review period, and the technical analysis performed to identify the environmental effects of the proposed project. The alternatives analyzed in this EIR include the following four alternatives in addition to the proposed project that is described in Section 2.0, Project Description.

- No Project (No Build) Alternative

- Reduced Land Area Project Alternative
- Reduced Residential Intensity/Density Project Alternative
- Smaller-Scale Project Alternative

NO PROJECT (NO BUILD) ALTERNATIVE

The CEQA Guidelines (Section 15126.6[e]) require consideration of a no project alternative that represents the existing conditions, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved. For purposes of this analysis, the No Project (No Build) Alternative assumes that development of the Plan Area would not occur, and the Plan Area would remain in its current agricultural condition. It is noted that the No Project (No Build) Alternative would fail to meet the project objectives identified for the West Area Specific Plan.

REDUCED LAND AREA PROJECT ALTERNATIVE

Under this alternative, the Plan Area would be developed with the same components as described in the Project Description, but the area utilized for the development would be reduced by approximately 20 percent. Under this alternative, approximately 162 acres of land in the northeast corner of the Plan Area would be removed. This removal area would include the 52.85-acre Mortensen property (APN 21101108) and the 108.32-acre Madolora/Global property (APN 21101109), which are shown on Figure 5.0-1. The resultant Plan Area would include approximately 635 acres. The proposed land uses within this area identified for removal under this alternative would be incorporated into the remaining 635 acres of the Plan Area, which would increase the residential density of the Plan Area under this alternative, while retaining the same number of residences, mixed use commercial areas, schools, parks, etc. as the proposed project. This alternative would still establish a site for a third 10.0-acre elementary school to be developed by the Santa Rita Union School District (District). However, if the District decides against the elementary school siting, the area will instead include the development of residential units.

Under this alternative the average residential density (units per net acre) would increase from 9.0 to approximately 11.3 units/acre. It is assumed that the number of Neighborhood Edge (NE) parcels would be reduced, and the number of Neighborhood General 1 (NG-1) parcels would increase. The proposed Village Center would remain unchanged under this alternative, and would still include up to 571,500 square feet of mixed use commercial floor area and a minimum of 91 dwelling units.

REDUCED RESIDENTIAL INTENSITY/DENSITY PROJECT ALTERNATIVE

Under this alternative, the Plan Area would be developed with a reduction in the overall residential intensity/density while maintaining the approximate overall project footprint. For the purposes of discussion, this option considers a 25 percent reduction in the intensity/density of the residential components of the project while maintaining the approximately 797-acre project footprint. This would result in fewer residential lots, but larger lot sizes. This alternative would

result in up to 3,255 residential units. This alternative would retain the approximately 571,500 square feet of mixed commercial uses, the five proposed schools (three elementary, one middle, and one high school), and the same acreage of parks and detention basins as the proposed project.

Under this alternative, the average residential density (units per net acre) would decrease from 9.0 to approximately 6.8 units/acre. It is assumed that the number of Neighborhood Edge (NE) parcels would be increased, and the number of Neighborhood General 1 (NG-1) and Neighborhood General 2 (NG-2) parcels would increase. The proposed Village Center would remain unchanged under this alternative, and would still include up to 571,500 square feet of mixed use commercial floor area and a minimum of 91 dwelling units.

This alternative is expected to be inconsistent with the Salinas General Plan's standards for the Plan Area, which require a minimum of 3,553 residential units within the Plan Area, and the incorporation of New Urbanism concepts which mandates that new residential development have a minimum average density of 9 dwelling units per net residential acre.

SMALLER-SCALE PROJECT ALTERNATIVE

Under this alternative, the Plan Area would be reduced by approximately 33 percent and the proposed residential and non-residential uses would also be reduced by approximately 33 percent. For the purposes of discussion, this alternative assumes that approximately 264 acres of land along the entire eastern boundary of the Plan Area would be removed and remain as undeveloped agricultural land. The resultant Plan Area under this alternative would be approximately 533 acres in size, and include up to 2,908 residential units, up to 382,905 square feet of commercial/mixed use building area, and up to 119 acres of public facilities (including two elementary schools, a high school, middle school, supplemental detention/retention basins and up to 8 parks). The residential densities under this alternative would be similar to the proposed Project.

Table 5.0-1 provides a summary of each alternative's ability to meet the project objectives.

TABLE 5.0-1: ABILITY OF ALTERNATIVES TO MEET PROPOSED PROJECT OBJECTIVES

PROJECT OBJECTIVES	*NO PROJECT (NO BUILD) ALTERNATIVE*	*REDUCED LAND AREA PROJECT ALTERNATIVE*	*REDUCED RESIDENTIAL INTENSITY/DENSITY ALTERNATIVE*	*SMALLER-SCALE PROJECT ALTERNATIVE*
Create a community with a compact form that promotes sustainable neighborhood design and is pedestrian, bicycle, and transit friendly.	No	Yes	No	Yes
Provide a variety of land uses in easy walking distance of housing including a mixed use village, parks, and schools to reduce vehicle miles travelled.	No	Yes	Yes	Yes
Provide parks and other public green space in accordance with General Plan standards that are designed to be safe and easily accessible to residents.	No	Yes	Yes	Yes
Provide public services and infrastructure improvements that achieve and maintain City service standards.	No	Yes	Yes	Yes
Provide an inviting tree-lined street system which incorporates traffic calming and other measures	No	Yes	Yes	Yes
Establish an interconnected sidewalk/pathway and open space system throughout the development which links to the greater North of Boronda FGA and the City as a whole.	No	Yes	Yes	Yes
Create a sense of place and unique identity through the use of entry treatments, landscaping, streetscapes, public art, decorative street lighting, pedestrian amenities and other elements.	No	Yes	Yes	Yes

ALTERNATIVES NOT SELECTED FOR FURTHER ANALYSIS

A Notice of Preparation was circulated to the public to solicit recommendations for a reasonable range of alternatives to the proposed project. Additionally, a public scoping meeting was held during the public review period to solicit recommendations for a reasonable range of alternatives to the proposed project. No specific alternatives were recommended by commenting agencies or the general public during the NOP public review process.

CEQA Guidelines section 15126.6(f)(2) describes conditions under which consideration of alternative project location is appropriate. The key question to be considered is whether or not any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location and whether the proposed project, placed at an alternative location, is environmentally superior to the proposed project. Only locations that would avoid or

substantially lessen any of the significant effects of the project need be considered for inclusion in an EIR.

The City of Salinas considered alternative locations early in the Draft EIR preparation process. The City's key considerations in identifying an alternative location were as follows:

- Is there an alternative location where significant effects of the project would be avoided or substantially lessened?
- Is there a site available within the City's Sphere of Influence with the appropriate size and characteristics such that it would meet the basic project objectives?

The City's consideration of alternative locations for the project included a review of previous land use planning and environmental documents in Salinas, including the General Plan. The City found that there are three potential alternative locations that exist within the City's Sphere of Influence with the appropriate size and characteristics that would meet the basic project objectives. These alternative project locations are shown on Figure 5.0-2. However, upon further screening, these alternatives were determined to be unsuitable as viable alternative project locations, as described below.

Alternative Location 1 - Central Area Specific Plan (CASP)

As shown on Figure 5.0-2, the Central Area Specific Plan area encompasses approximately 792 acres of land immediately east of the West Area Specific Plan, within the City's Future Growth Area. The City is currently processing an application for the Central Area Specific Plan, which is anticipated to include between 3,419 and 3,983 residential units, approximately 250,000 square feet of retail and office uses, three schools, and various parks, civic buildings, and supporting infrastructure. Given that this alternative location site is currently the subject of an active application with the City, and preparation of a specific plan for this area is currently underway, this alternative location was rejected for further analysis and consideration in this EIR.

Alternative Location 2 - East Area Specific Plan (EASP)

As shown on Figure 5.0-2, the East Area Specific Plan area encompasses approximately 879 acres of land to the east of the West Area Specific Plan and immediately east of the Central Area Specific Plan, within the City's Future Growth Area. Preparation of a detailed specific plan for this area is pending, and anticipated to occur in the future. The East Area Specific Plan may accommodate up to 4,000 residential units, approximately 22 acres of village center/commercial, and extensive areas of habitat preservation. The East Area Specific Plan includes the Natividad Creek corridor, which has areas of ecological sensitivity. A grove of heritage Oaks are also located within this area. Development of the proposed West Area Specific Plan on the East Area Specific Plan site would not reduce or avoid any of the significant environmental impacts identified for the West Area Specific Plan in this EIR. Additionally, this area is subject to a pending specific plan that will guide growth and development of this portion of the City's Future Growth Area. For these reasons, this alternative location was rejected for further analysis and consideration in this EIR.

Alternative Location 3 - Eastern Future Growth Area

As shown on Figure 5.0-2, Alternative Location 3 encompasses approximately 863 acres of land generally to the south of the East Area Specific Plan, between Williams Road and Bardin Road, within the City's Future Growth Area. A large part of the southern portion of this alternative location site would overlap with the Salinas Municipal Airport Area of Influence, as shown in Figure 5.0-2. Additionally, over half of this area is identified in the City General Plan as Industrial land uses, and conversion to primarily residential development would eliminate critical future job-generating land uses in the City. Development of this Plan Area would not reduce or eliminate any significant environmental impacts and it would require the City to consider residential land uses in an area that is intended for industrial uses.

5.3 ENVIRONMENTAL ANALYSIS

The alternatives analysis provides a summary of the relative impact level of significance associated with each alternative for each of the environmental issue areas analyzed in this EIR. Following the analysis of each alternative, Table 5.0-1 summarizes the comparative effects of each alternative.

NO PROJECT (NO BUILD) ALTERNATIVE

Air Quality

As a result of development in Monterey County the North Central Coast Air Basin (NCCAB) would continue to experience increases in criteria pollutants. Monterey County has a state designation of nonattainment for ozone and PM_{10}, and is either unclassified or attainment for all other criteria pollutants. The County has a national designation of unclassified or attainment for all criteria pollutants.

The WASP would result in increased emissions primarily from area source and mobile source emissions associated with project implementation. The MBARD has established operations related emissions thresholds of significance and it was determined that annual unmitigated emissions of ROG, NOx, and PM_{10} exceed the MBARD thresholds of significance. Even with basic mitigation incorporated into the model, the WASP project would exceed the thresholds of significance for these criteria pollutants.

The MBARD's *CEQA Air Quality Guidelines* provides a list of mitigation measures that would help the proposed project comply with the MBARD's *2008 AQMP* and the *Triennial Plan Revision 2009-2011*. As is currently proposed, the WASP is expected to be built out under a staged approach, and all mitigation would be applicable to each phase. However, even with the application of these and other mitigation measures, operational emissions levels would remain above the defined thresholds of significance and it was determined that the WASP would have a *cumulatively considerable contribution* and *significant and unavoidable* impact on the region's air quality.

Under the No Project (No Build) Alternative, the Plan Area would not be developed, and there would be no net change in emissions and no potential for a conflict with any adopted plans or

policies related to air quality. As such, the project level and cumulative impacts would be greatly reduced when compared to the proposed project.

Biological Resources

There are various biological resources, including habitat, that occurs throughout the region. The Plan Area is intensively cultivated and provides little to no habitat for most special status species. Nevertheless, there remains a potential that special status species could occupy the Plan Area from time to time. Mitigation measures incorporated into the WASP project are intended to avoid, minimize, and compensate for direct and indirect effects to biological resources, including special status species and their habitats.

The WASP project will eliminate the onsite irrigation ditches, which provide some, but relatively little habitat quality. The WASP project is anticipated to eliminate the roadside ditches located along East Boronda Road and San Juan Grade Road. These ditches also provide some, but relatively little habitat quality. Mitigation measures incorporated into the WASP project are intended to ensure that any fill activities are authorized by the appropriate regulatory agencies prior to disturbance. The permit process ensures that minimization and compensation is incorporated into the activity.

The WASP project will change the habitat type from an open agricultural field to an urban developed area. Urban development will provide habitat for a variety of species; however, it will be lower quality habitat then the current agricultural land. While the City has evaluated urban development in the Plan Area extensively through the General Plan and FGA process, and subsequently determined that urban development in this location is appropriate, the physical change is not reversible and there are no mitigation measures that can fully mitigate this impact. implementation of the WASP would have a cumulatively considerable contribution and significant and unavoidable impact to biological resources.

Under the No Project (No Build) Alternative, the WASP would not be constructed, no habitat would be removed, no wetlands disturbed, and no ground disturbing activities would occur. Therefore, potential for impacts to biological resources would be eliminated under the No Project (No Build) Alternative. Impacts to biological resources would be reduced as compared to the proposed project.

Cultural Resources

No cultural resources were identified within the WASP Plan Area, according to maps and files maintained by the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS), and three previous cultural resource inventories, which have examined the area. As with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of a previously unknown cultural and/or historical resource or human remains. Implementation of the mitigation measures incorporated into this EIR would reduce impacts associated with unknown cultural resources where they to be found.

The No Project (No Build) Alternative would result in no ground disturbing activities and would not have the potential to disturb or destroy cultural, historic, and archaeological resources, as well as paleontological resources. While the WASP is not anticipated to result in significant impacts to cultural resources, the No Project (No Build) Alternative would result in slightly less potential for impacts to cultural resources as the entire Plan Area would continue to be used for agriculture production.

Greenhouse Gases and Climate Change

Given the size and scope of development of the WASP, both construction and operational GHG emissions generated by development of the WASP are expected to have a significant impact on the environment. The overall annual GHG emissions associated with the WASP would be reduced with mitigation. However, even with mitigation applied, the WASP would exceed the construction and operational thresholds established for the proposed project. However, with mitigation, the WASP would not conflict with the applicable GHG-related plans, policies, and regulations. Nevertheless, the WASP would have an individual and cumulative impact related to greenhouse gases and climate change that is significant and unavoidable.

Under the No Project (No Build) Alternative, the Plan Area would not be developed, and there would be no net change in emissions and no potential for a conflict with any adopted plans or policies related to GHG reductions. As such, this impact would be reduced when compared to the proposed project.

Hazards and Hazardous Materials

The Plan Area is currently agricultural land, used extensively for the cultivation of lettuce, cauliflower, broccoli, and strawberries. Several small clusters of buildings located on the northern, western, and eastern edges of the Plan Area include residences, barns, warehouses, and storage yards. These structures have supported the agricultural operations and some have been used or are currently being used to temporarily store fertilizers, pesticides, herbicides and other materials normally associated with ongoing agricultural cultivation.

Due to the long-term use of the land for agricultural purposes, the site has the potential for certain environmental conditions related to pesticide and herbicide application that could have caused these chemicals to be present in the soil. The Phase 1 Environmental Site Assessment (ESA) identified the following chemicals in connections with the Project site: OCPs, arsenic, PCBs, and TPH. Additionally, the WASP includes components which would likely use a variety of hazardous materials including: paints, cleaners, and cleaning solvents.

There would be a risk of release of these materials into the environment if they are not stored and handled in accordance with best management practices approved by Environmental Health Division of the County of Monterey Health Department. However, implementation of the mitigation measures identified within this EIR would minimize the potential for an impact.

Under the No Project (No Build) Alternative, no new land uses would be introduced to the Plan Area, and the potential for hazardous material release in the Plan Area would be reduced.

Ongoing pesticide use would occur within the area to remain in agriculture, and this would have the potential to generate negative health effects on new residents in the development. Any negative health effects associated with these chemicals would be alleviated through compliance with state and federal regulations. There would be not long-term potential for hazards associated with use and generation of household and commercial hazardous wastes, because development would not occur. While the WASP is not anticipated to result in significant impacts associated with hazards and hazardous materials, the No Project (No Build) Alternative would result in less potential for impacts.

Hydrology and Water Quality

Implementation of the WASP has the potential to result in the violation of water quality standards and waste discharge of pollutants into surface waters during both construction and long-term operations. Construction operations could result in temporary increases in runoff, erosion, sedimentation, soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas. The long-term operation of the WASP could result in long-term impacts to surface water quality from urban stormwater runoff and could enter groundwater or surface water systems. Additionally, the proposed project would result in new impervious surfaces that could reduce rainwater infiltration and groundwater recharge. Mitigation measures incorporated into the project would reduce potential water quality impacts to a less than significant level. The WASP would not place persons or structures in a flood hazard zone.

Under the No Project (No Build) Alternative, potential water quality impacts from construction and operation of the WASP would be eliminated. Under this alternative, the land would be kept in its present state with the majority of the Plan Area either fallow land or being used for agricultural purposes. The No Project (No Build) Alternative would have a greater chance of groundwater recharge because it does not introduce large areas of impervious surfaces as would the WASP. Moreover, the potential to result in the violation of water quality standards would be reduced under this alternative as compared with the proposed project. As such, potential impacts related to hydrology and water quality would be reduced under this.

Noise

Some existing noise-sensitive receptors located near the Plan Area are currently exposed to exterior traffic noise levels exceeding the 60 dB L_{dn} exterior noise level standard for residential uses. In some locations, the noise levels are predicted to increases to levels that would trigger a new exceedance of the 60 dB L_{dn} exterior noise level standard, or exceed the FICON allowable increase criteria. A mitigation measure has been incorporated into the project to ensure that the project applicant consider repaving affected roadway segments, which is anticipated to reduce traffic noise levels along affected roadways.

The proposed project has the potential to expose new sensitive receptors to excessive noise. Several mitigation measures have been incorporated into the project to ensure that the potential noise impacts to new sensitive receptors is mitigated. For instance, there are measures that require sound walls and/or landscaped berms as a form of attenuation for traffic noise. There are

also measures that address stationary sources (i.e. generators, mechanical equipment, etc.) to ensure that they do not adversely affect sensitive receptors. Lastly, there are measures that address business operations (i.e. loading docks, truck routes, etc.) to ensure that they do not adversely affect sensitive receptors.

The proposed project has the potential to increase noise levels and vibration levels associated with construction activities. Mitigation measures have been incorporated into the project to require construction activities that limit construction to the least noise sensitive times of the day/week, and to ensure that all equipment would be fitted with factory-equipped mufflers.

Under the No Project (No Build) Alternative, the Plan Area would not be developed and there would be no potential for new noise sources. As such, this alternative would have less impact relative to the proposed project.

Population and Housing

The City anticipates growth within the community over time, and has responded to the anticipated growth by establishing a Future Growth Area (FGA). The FGA was established through a community process that focuses on allowing new development to specific areas of the city that have been determined to have adequate infrastructure and resources to accommodate the growth. The Plan Area is within the FGA, and is a WASP is a planning document that implements the City's intent to focus new development, and the growth that goes along with the new development, into the FGA. The WASP would not displace substantial numbers of existing housing and/or substantial numbers of people, but would instead provide new housing consistent with the City's General Plan. The WASP does not divide the community, but rather, it is an extension of the existing community.

Under the No Project (No Build) Alternative, the Plan Area would not be developed and the Plan Area would not accommodate the City's anticipated growth. Growth would still be anticipated to occur within the region, but it would not be accommodated in the FGA which has undergone extensive planning efforts by the City and community for over a decade. This would not be consistent with the FGA and General Plan. The City would need to look to other undeveloped areas of the region to develop for new housing which would be expected to have environmental impacts that have not yet been assessed. Overall, this alternative would have a greater impact when compared to the proposed project.

Public Services

New development would place increased demands on public services such as police, fire, schools, parks, libraries, and other governmental services. The WASP project incorporates sites for new schools and parks. A new station will be built within the Central Area Specific Plan to accommodate buildout of the FGA, including the Plan Area. The Plan Area is currently served by Station 6 located at 45 East Bolivar Street. The City has indicated that a new public safety facility is needed to meet the needs of the City in the long-term, although WASP project does not directly trigger the need for a new facility. Additional staff and equipment for fire and police services will be warranted.

Mitigation measures have been incorporated into the project that require payment of impact fees to public service agencies to ensure that the WASP project does not have adverse financial impacts on these agencies. The WASP includes land for schools and parks to ensure the increased demand for these services is met within the Plan Area.

Under the No Project (No Build) Alternative, there would be no increased demand for police, fire, schools, parks, or other public services. Alternatively, this alternative would result in no new school or park facilities, which are designed to accommodate more than the demand that is generated by the WASP. Overall, this alternative would have a slightly greater impact to public services when compared to the proposed project.

Transportation and Circulation

Implementation of the WASP would cause an increase in traffic on roadway segments, intersections and ramp junctions that would cause traffic operations to degrade to an unacceptable level of service. Mitigation measures have been incorporated into the project to reduce these traffic impacts to a less than significant level. In some cases, the cumulative traffic conditions on roadway segments, intersections and ramp junctions are anticipated to degrade to an unacceptable level of service. The applicants will be required to make certain traffic improvements and pay traffic impact fees, but some of these cumulative impacts will remain significant and unavoidable.

Under the No Project (No Build) Alternative, there would be no new traffic generated within the Plan Area. This alternative would also not result in new traffic improvements on the City's roadway system and it would not result in payments of traffic impact fees into the City's CIP program that would be used for the roadway system. Existing deficiencies in the traffic system would not receive the benefit of improvements to improve existing deficiencies, however, this would be more than offset by the fact that there would be no new contribution to degrading traffic levels of service at a project and cumulative level. Overall, this alternative would have less of an overall traffic impact than the proposed project.

Utilities

Implementation of the WASP could result in potentially significant impacts to the utility systems including wastewater, water, storm water drainage, and solid waste providers. Mitigation measures have been incorporated into the project to ensure that capacity is available and any impacts from increased demand are reduced.

Under the No Project (No Build) Alternative, the Plan Area would not have an increased demand for any utilities, including wastewater, water, storm drainage, or solid waste disposal. There would be no need to construct new infrastructure. Overall, the impact on utilities would be reduced under this alternative.

REDUCED LAND AREA PROJECT ALTERNATIVE

Air Quality

As a result of development in Monterey County the North Central Coast Air Basin (NCCAB) would continue to experience increases in criteria pollutants. Monterey County has a state designation of nonattainment for ozone and PM_{10}, and is either unclassified or attainment for all other criteria pollutants. The County has a national designation of unclassified or attainment for all criteria pollutants.

The WASP would result in increased emissions primarily from area source and mobile source emissions associated with project implementation. The MBARD has established operations related emissions thresholds of significance and it was determined that annual unmitigated emissions of ROG, NOx, and PM_{10} exceed the MBARD thresholds of significance. Even with basic mitigation incorporated into the model, the WASP project would exceed the thresholds of significance for these criteria pollutants.

The MBARD's *CEQA Air Quality Guidelines* provides a list of mitigation measures that would help the proposed project comply with the MBARD's *2008 AQMP* and the *Triennial Plan Revision 2009-2011*. As is currently proposed, the WASP is expected to be built out under a staged approach, and all mitigation would be applicable to each phase. However, even with the application of these and other mitigation measures, operational emissions levels would remain above the defined thresholds of significance and it was determined that the WASP would have a *cumulatively considerable contribution* and *significant and unavoidable* impact on the region's air quality.

Under the Reduced Land Area Project Alternative, the Plan Area would be developed with a 20 percent smaller development area, with an overall increase in residential density. This would provide more compact development, providing greater opportunities for non-motorized transportation choices (such as walking or cycling). This would slightly reduce vehicle miles travelled (VMT) as compared to the proposed project, which would slightly reduce the mobile source emissions slightly. As such, this impact would be slightly reduced when compared to the WASP.

Biological Resources

There are various biological resources, including habitat, that occurs throughout the region. The Plan Area is intensively cultivated and provides little to no habitat for most special status species. Nevertheless, there remains a potential that special status species could occupy the Plan Area from time to time. Mitigation measures incorporated into the WASP project are intended to avoid, minimize, and compensate for direct and indirect effects to biological resources, including special status species and their habitats.

The WASP project will eliminate the onsite irrigation ditches, which provide some, but relatively little habitat quality. The WASP project is anticipated to eliminate the roadside ditches located along East Boronda Road and San Juan Grade Road. These ditches also provide some, but relatively little habitat quality. Mitigation measures incorporated into the WASP project are

intended to ensure that any fill activities are authorized by the appropriate regulatory agencies prior to disturbance. The permit process ensures that minimization and compensation is incorporated into the activity.

The WASP project will change the habitat type from an open agricultural field to an urban developed area. Urban development will provide habitat for a variety of species; however, it will be lower quality habitat then the current agricultural land. While the City has evaluated urban development in the Plan Area extensively through the General Plan and FGA process, and subsequently determined that urban development in this location is appropriate, the physical change is not reversible and there are no mitigation measures that can fully mitigate this impact. implementation of the WASP would have a cumulatively considerable contribution and significant and unavoidable impact to biological resources.

Under the Reduced Land Area Project Alternative, less habitat would be removed, and fewer ground disturbing activities would occur. Therefore, potential for impacts to biological resources would be reduced under the Reduced Land Area Project Alternative as compared with the proposed project.

Cultural Resources

No cultural resources were identified within the WASP Plan Area, according to maps and files maintained by the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS), and three previous cultural resource inventories, which have examined the area. As with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of a previously unknown cultural and/or historical resource or human remains. Implementation of the mitigation measures incorporated into this EIR would reduce impacts associated with unknown cultural resources where they to be found.

The Reduced Land Area Project Alternative would result in fewer ground disturbing activities and would have a slightly reduced potential to disturb or destroy cultural, historic, and archaeological resources, as well as paleontological resources. While the WASP is not anticipated to result in significant impacts to cultural resources with mitigation, the Reduced Land Area Project Alternative would result in slightly less potential for impacts to cultural resources, as a portion of the Plan Area would remain undeveloped.

Greenhouse Gases and Climate Change

Given the size and scope of development of the WASP, both construction and operational GHG emissions generated by development of the WASP are expected to have a significant impact on the environment. The overall annual GHG emissions associated with the WASP would be reduced with mitigation. However, even with mitigation applied, the WASP would exceed the construction and operational thresholds established for the proposed project. However, with mitigation, the WASP would not conflict with the applicable GHG-related plans, policies, and regulations. Nevertheless, the WASP would have an individual and cumulative impact related to greenhouse gases and climate change that is significant and unavoidable.

The Reduced Land Area Project Alternative would not develop approximately 162 acres that is proposed to be developed under the proposed project. This would provide more compact development, creating more opportunities for non-motorized transportation options (such as walking or cycling). This is likely to reduce overall vehicle miles travelled (VMT) as compared to the proposed project. There would still be an increase in emissions, but the emissions per capita would be slightly reduced. Therefore, this impact would be slightly reduced when compared to the proposed project.

Hazards and Hazardous Materials

The Plan Area is currently agricultural land, used extensively for the cultivation of lettuce, cauliflower, broccoli, and strawberries. Several small clusters of buildings located on the northern, western, and eastern edges of the Plan Area include residences, barns, warehouses, and storage yards. These structures have supported the agricultural operations and some have been used or are currently being used to temporarily store fertilizers, pesticides, herbicides and other materials normally associated with ongoing agricultural cultivation.

Due to the long-term use of the land for agricultural purposes, the site has the potential for certain environmental conditions related to pesticide and herbicide application that could have caused these chemicals to be present in the soil. The Phase 1 Environmental Site Assessment (ESA) identified the following chemicals in connections with the Project site: OCPs, arsenic, PCBs, and TPH. Additionally, the WASP includes components which would likely use a variety of hazardous materials including: paints, cleaners, and cleaning solvents.

There would be a risk of release of these materials into the environment if they are not stored and handled in accordance with best management practices approved by Environmental Health Division of the County of Monterey Health Department. However, implementation of the mitigation measures identified within this EIR would minimize the potential for an impact.

Under the Reduced Land Area Project Alternative, the land area to be developed would be reduced by 20 percent and the potential for exposure to hazardous materials, or a release of hazardous materials would be reduced proportionately. Ongoing pesticide use would occur within the area to remain in agriculture, and this would have the potential to generate negative health effects on new residents in the development. Similar to the proposed project, new development would introduce new sensitive receptors into an area that contains land that has historically utilized chemicals for agricultural production. Any negative health effects associated with the residuals of these chemicals would be alleviated through compliance with state and federal regulations that require remediation when above certain thresholds. There would be a long-term potential for hazards associated with use and generation of household and commercial hazardous wastes, although compliance with state and federal regulations would be required. While the WASP is not anticipated to result in significant impacts associated with hazards and hazardous materials, the Reduced Land Area Project Alternative would result in slightly less potential for impacts.

Hydrology and Water Quality

Implementation of the WASP has the potential to result in the violation of water quality standards and waste discharge of pollutants into surface waters during both construction and long-term operations. Construction operations could result in temporary increases in runoff, erosion, sedimentation, soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas. The long-term operation of the WASP could result in long-term impacts to surface water quality from urban stormwater runoff and could enter groundwater or surface water systems. Additionally, the proposed project would result in new impervious surfaces that could reduce rainwater infiltration and groundwater recharge. Mitigation measures incorporated into the project would reduce potential water quality impacts to a less than significant level. The WASP would not place persons or structures in a flood hazard zone.

Under the Reduced Land Area Project Alternative, potential water quality impacts from construction and operation of the WASP would be reduced. Under this alternative, the developed area would be reduced by 20 percent when compared with the proposed project. The Reduced Land Area Project Alternative would have a greater chance of groundwater recharge because it would reduce the amount of impervious surfaces by 20 percent as compared to the WASP. Overall, the potential to result in the violation of water quality standards would be reduced under this alternative when compared with the proposed project. As such, potential impacts related to hydrology and water quality would be reduced under this alternative when compared to the proposed project.

Noise

Some existing noise-sensitive receptors located near the Plan Area are currently exposed to exterior traffic noise levels exceeding the 60 dB L_{dn} exterior noise level standard for residential uses. In some locations, the noise levels are predicted to increases to levels that would trigger a new exceedance of the 60 dB L_{dn} exterior noise level standard, or exceed the FICON allowable increase criteria. A mitigation measure has been incorporated into the project to ensure that the project applicant consider repaving affected roadway segments, which is anticipated to reduce traffic noise levels along affected roadways.

The proposed project has the potential to expose new sensitive receptors to excessive noise. Several mitigation measures have been incorporated into the project to ensure that the potential noise impacts to new sensitive receptors is mitigated. For instance, there are measures that require sound walls and/or landscaped berms as a form of attenuation for traffic noise. There are also measures that address stationary sources (i.e. generators, mechanical equipment, etc.) to ensure that they do not adversely affect sensitive receptors. Lastly, there are measures that address business operations (i.e. loading docks, truck routes, etc.) to ensure that they do not adversely affect sensitive receptors.

The proposed project has the potential to increase noise levels and vibration levels associated with construction activities. Mitigation measures have been incorporated into the project to

require construction activities that limit construction to the least noise sensitive times of the day/week, and to ensure that all equipment would be fitted with factory-equipped mufflers.

Under the Reduced Land Area Project Alternative, development would be reduced by 20 percent when compared with the proposed project. As a result of less development, noise levels associated with traffic, stationary sources, and construction would be expected to be reduced under this alternative. As such, this alternative would have less impact relative to the proposed project.

Population and Housing

The City anticipates growth within the community over time, and has responded to the anticipated growth by establishing a Future Growth Area (FGA). The FGA was established through a community process that focuses on allowing new development to specific areas of the city that have been determined to have adequate infrastructure and resources to accommodate the growth. The Plan Area is within the FGA, and is a WASP is a planning document that implements the City's intent to focus new development, and the growth that goes along with the new development, into the FGA. The WASP would not displace substantial numbers of existing housing and/or substantial numbers of people, but would instead provide new housing consistent with the City's General Plan. The WASP does not divide the community, but rather, it is an extension of the existing community.

Under the Reduced Land Area Project Alternative, development would be reduced by 20 percent when compared with the proposed project. Development of housing would still occur under this alternative, but fewer units would be built. Growth would still be anticipated to occur within the region, but it would not be fully accommodated in the FGA which has undergone extensive planning efforts by the City and community for over a decade. This would not be consistent with the FGA and General Plan. The City would need to look to other undeveloped areas of the region to develop for new housing which would be expected to have environmental impacts that have not yet been assessed. Overall, this alternative would have a greater impact when compared to the proposed project.

Public Services

New development would place increased demands on public services such as police, fire, schools, parks, libraries, and other governmental services. The WASP project incorporates sites for new schools and parks. A new station will be built within the Central Area Specific Plan to accommodate buildout of the FGA, including the Plan Area. The Plan Area is currently served by Station 6 located at 45 East Bolivar Street. The City has indicated that a new public safety facility is needed to meet the needs of the City in the long-term, although WASP project does not directly trigger the need for a new facility. Additional staff and equipment for fire and police services will be warranted.

Mitigation measures have been incorporated into the project that require payment of impact fees to public service agencies to ensure that the WASP project does not have adverse financial

impacts on these agencies. The WASP includes land for schools and parks to ensure the increased demand for these services is met within the Plan Area.

Under the Reduced Land Area Project Alternative, the development area would be reduced by 20 percent. Residential and non-residential development would be reduced under the Reduced Land Area Project Alternative; therefore, the demand for police, fire and other public services would be reduced. This alternative would still result in development of public facilities (i.e. schools and parks) and would be required to pay the appropriate public safety impact fees. Overall, this alternative would have a slightly reduced impact to public services when compared to the proposed project.

Transportation and Circulation

Implementation of the WASP would cause an increase in traffic on roadway segments, intersections and ramp junctions that would cause traffic operations to degrade to an unacceptable level of service. Mitigation measures have been incorporated into the project to reduce these traffic impacts to a less than significant level. In some cases, the cumulative traffic conditions on roadway segments, intersections and ramp junctions are anticipated to degrade to an unacceptable level of service. The applicants will be required to make certain traffic improvements and pay traffic impact fees, but some of these cumulative impacts will remain significant and unavoidable.

Under the Reduced Land Area Project Alternative, the development area would be reduced by 20 percent. Residential and non-residential development would be reduced under the Reduced Land Area Project Alternative; therefore, traffic generated in the Plan Area would be reduced. This alternative would still result in new traffic improvements on the City's roadway system to accommodate the new traffic generated. It would also still result in payments of traffic impact fees into the City's CIP program that would be used for the roadway system. Existing deficiencies in the traffic system would receive some benefit of improvements to improve existing deficiencies, however, there would still be significant and unavoidable cumulative impacts. Overall, this alternative would have less of an overall traffic impact than the proposed project.

Utilities

Implementation of the WASP could result in potentially significant impacts to the utility systems including wastewater, water, storm water drainage, and solid waste providers. Mitigation measures have been incorporated into the project to ensure that capacity is available and any impacts from increased demand are reduced.

Under the Reduced Land Area Project Alternative, the development area would be reduced by 20 percent. The total quantity of infrastructure installed would be reduced, but the demand for utility services would be the same. The total storm drainage runoff would be reduced due to the reduction in impervious surfaces. Overall, the demand for utilities would be reduced under this alternative when compared to the proposed project.

REDUCED RESIDENTIAL INTENSITY/DENSITY PROJECT ALTERNATIVE

Air Quality

As a result of development in Monterey County the North Central Coast Air Basin (NCCAB) would continue to experience increases in criteria pollutants. Monterey County has a state designation of nonattainment for ozone and PM_{10}, and is either unclassified or attainment for all other criteria pollutants. The County has a national designation of unclassified or attainment for all criteria pollutants.

The WASP would result in increased emissions primarily from area source and mobile source emissions associated with project implementation. The MBARD has established operations related emissions thresholds of significance and it was determined that annual unmitigated emissions of ROG, NOx, and PM_{10} exceed the MBARD thresholds of significance. Even with basic mitigation incorporated into the model, the WASP project would exceed the thresholds of significance for these criteria pollutants.

The MBARD's *CEQA Air Quality Guidelines* provides a list of mitigation measures that would help the proposed project comply with the MBARD's *2008 AQMP* and the *Triennial Plan Revision 2009-2011*. As is currently proposed, the WASP is expected to be built out under a staged approach, and all mitigation would be applicable to each phase. However, even with the application of these and other mitigation measures, operational emissions levels would remain above the defined thresholds of significance and it was determined that the WASP would have a *cumulatively considerable contribution* and *significant and unavoidable* impact on the region's air quality.

Under the Reduced Residential Intensity/Density Project Alternative, there would be a 25 percent reduction in the intensity/density of the residential portions of the Plan Area, and the overall residential density would be decreased. Although less compact development generally increases overall vehicle miles travelled (VMT), the smaller number of residential units under this alternative as compared with the proposed project would reduce air quality emissions under area source, mobile source, and energy source. As such, this impact would be reduced when compared to the proposed project.

Biological Resources

There are various biological resources, including habitat, that occurs throughout the region. The Plan Area is intensively cultivated and provides little to no habitat for most special status species. Nevertheless, there remains a potential that special status species could occupy the Plan Area from time to time. Mitigation measures incorporated into the WASP project are intended to avoid, minimize, and compensate for direct and indirect effects to biological resources, including special status species and their habitats.

The WASP project will eliminate the onsite irrigation ditches, which provide some, but relatively little habitat quality. The WASP project is anticipated to eliminate the roadside ditches located along East Boronda Road and San Juan Grade Road. These ditches also provide some, but

relatively little habitat quality. Mitigation measures incorporated into the WASP project are intended to ensure that any fill activities are authorized by the appropriate regulatory agencies prior to disturbance. The permit process ensures that minimization and compensation is incorporated into the activity.

The WASP project will change the habitat type from an open agricultural field to an urban developed area. Urban development will provide habitat for a variety of species; however, it will be lower quality habitat then the current agricultural land. While the City has evaluated urban development in the Plan Area extensively through the General Plan and FGA process, and subsequently determined that urban development in this location is appropriate, the physical change is not reversible and there are no mitigation measures that can fully mitigate this impact. implementation of the WASP would have a cumulatively considerable contribution and significant and unavoidable impact to biological resources.

Under the Reduced Residential Intensity/Density Project Alternative, an equivalent amount of habitat would be removed as under the proposed project, and a similar level of ground disturbing activities would occur as compared with the proposed project. Therefore, there would be an approximately equal potential for impacts to biological resources under this alternative as compared with the proposed project.

Cultural Resources

No cultural resources were identified within the WASP Plan Area, according to maps and files maintained by the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS), and three previous cultural resource inventories, which have examined the area. As with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of a previously unknown cultural and/or historical resource or human remains. Implementation of the mitigation measures incorporated into this EIR would reduce impacts associated with unknown cultural resources where they to be found.

The Reduced Residential Intensity/Density Project Alternative would result in a similar level of ground disturbing activities and would have a similar potential to disturb or destroy cultural, historic, and archaeological resources, as well as paleontological resources. While the WASP is not anticipated to result in significant impacts to cultural resources with mitigation, the Reduced Residential Intensity/Density Project Alternative would result in equal potential for impacts to cultural resources.

Greenhouse Gases and Climate Change

Given the size and scope of development of the WASP, both construction and operational GHG emissions generated by development of the WASP are expected to have a significant impact on the environment. The overall annual GHG emissions associated with the WASP would be reduced with mitigation. However, even with mitigation applied, the WASP would exceed the construction and operational thresholds established for the proposed project. However, with mitigation, the WASP would not conflict with the applicable GHG-related plans, policies, and regulations.

Nevertheless, the WASP would have an individual and cumulative impact related to greenhouse gases and climate change that is significant and unavoidable.

Under the Reduced Residential Intensity/Density Project Alternative, there would be a 25 percent reduction in the intensity/density of the residential portions of the Plan Area, and the overall residential density would be decreased. Although less compact development generally increases overall vehicle miles travelled (VMT), the smaller number of residential units under this alternative as compared with the proposed project would reduce greenhouse gas emissions. As such, this impact would be less when compared to the proposed project.

Hazards and Hazardous Materials

The Plan Area is currently agricultural land, used extensively for the cultivation of lettuce, cauliflower, broccoli, and strawberries. Several small clusters of buildings located on the northern, western, and eastern edges of the Plan Area include residences, barns, warehouses, and storage yards. These structures have supported the agricultural operations and some have been used or are currently being used to temporarily store fertilizers, pesticides, herbicides and other materials normally associated with ongoing agricultural cultivation.

Due to the long-term use of the land for agricultural purposes, the site has the potential for certain environmental conditions related to pesticide and herbicide application that could have caused these chemicals to be present in the soil. The Phase 1 Environmental Site Assessment (ESA) identified the following chemicals in connections with the Project site: OCPs, arsenic, PCBs, and TPH. Additionally, the WASP includes components which would likely use a variety of hazardous materials including: paints, cleaners, and cleaning solvents.

There would be a risk of release of these materials into the environment if they are not stored and handled in accordance with best management practices approved by Environmental Health Division of the County of Monterey Health Department. However, implementation of the mitigation measures identified within this EIR would minimize the potential for an impact.

Under the Reduced Residential Intensity/Density Project Alternative, the intensity/density of the residential components would be reduced by 25 percent as compared with the proposed project. Similar to the proposed project, new development would introduce new sensitive receptors into an area that contains land that has historically utilized chemicals for agricultural production. Any negative health effects associated with the residuals of these chemicals would be alleviated through compliance with state and federal regulations that require remediation when above certain thresholds. There would be a long-term potential for hazards associated with use and generation of household and commercial hazardous wastes, although compliance with state and federal regulations would be required. Overall, given the reduction in the intensity-density of this alternative as compared with the proposed project, it is expected that the Reduced Residential Intensity/Density Project Alternative would have a slightly reduced impact to this topic relative to the proposed project.

Hydrology and Water Quality

Implementation of the WASP has the potential to result in the violation of water quality standards and waste discharge of pollutants into surface waters during both construction and long-term operations. Construction operations could result in temporary increases in runoff, erosion, sedimentation, soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas. The long-term operation of the WASP could result in long-term impacts to surface water quality from urban stormwater runoff and could enter groundwater or surface water systems. Additionally, the proposed project would result in new impervious surfaces that could reduce rainwater infiltration and groundwater recharge. Mitigation measures incorporated into the project would reduce potential water quality impacts to a less than significant level. The WASP would not place persons or structures in a flood hazard zone.

Under the Reduced Residential Intensity/Density Project Alternative, potential water quality impacts from construction and operation would be slightly reduced. Under this alternative, the intensity/density of the residential uses would be reduced by 25 percent when compared with the proposed project, although the footprint would remain the same. This would result in fewer residential lots, but larger lot sizes. Since the residential lot sizes under this alternative would be larger when compared with the proposed project, there would be less impervious surface, and therefore there would be a greater chance of groundwater recharge under this alternative. As such, potential impacts related to hydrology and water quality would be reduced under the Reduced Intensity/Density Alternative when compared to the proposed project.

Noise

Some existing noise-sensitive receptors located near the Plan Area are currently exposed to exterior traffic noise levels exceeding the 60 dB L_{dn} exterior noise level standard for residential uses. In some locations, the noise levels are predicted to increases to levels that would trigger a new exceedance of the 60 dB L_{dn} exterior noise level standard, or exceed the FICON allowable increase criteria. A mitigation measure has been incorporated into the project to ensure that the project applicant consider repaving affected roadway segments, which is anticipated to reduce traffic noise levels along affected roadways.

The proposed project has the potential to expose new sensitive receptors to excessive noise. Several mitigation measures have been incorporated into the project to ensure that the potential noise impacts to new sensitive receptors is mitigated. For instance, there are measures that require sound walls and/or landscaped berms as a form of attenuation for traffic noise. There are also measures that address stationary sources (i.e. generators, mechanical equipment, etc.) to ensure that they do not adversely affect sensitive receptors. Lastly, there are measures that address business operations (i.e. loading docks, truck routes, etc.) to ensure that they do not adversely affect sensitive receptors.

The proposed project has the potential to increase noise levels and vibration levels associated with construction activities. Mitigation measures have been incorporated into the project to

require construction activities that limit construction to the least noise sensitive times of the day/week, and to ensure that all equipment would be fitted with factory-equipped mufflers.

Under the Reduced Residential Intensity/Density Project Alternative, the intensity/density of the residential uses would be reduced by 25 percent when compared with the proposed project. As a result of less development, noise levels associated with traffic, stationary sources, and construction would be expected to be reduced under this alternative. As such, this alternative would have less impact relative to the proposed project.

Population and Housing

The City anticipates growth within the community over time, and has responded to the anticipated growth by establishing a Future Growth Area (FGA). The FGA was established through a community process that focuses on allowing new development to specific areas of the city that have been determined to have adequate infrastructure and resources to accommodate the growth. The Plan Area is within the FGA, and is a WASP is a planning document that implements the City's intent to focus new development, and the growth that goes along with the new development, into the FGA. The WASP would not displace substantial numbers of existing housing and/or substantial numbers of people, but would instead provide new housing consistent with the City's General Plan. The WASP does not divide the community, but rather, it is an extension of the existing community.

Under the Reduced Residential Intensity/Density Project Alternative, the intensity/density of the residential uses would be reduced by 25 percent when compared with the proposed project. Development of housing would still occur under this alternative, but fewer units would be built. Growth would still be anticipated to occur within the region, but it would not be fully accommodated in the FGA which has undergone extensive planning efforts by the City and community for over a decade. This would not be consistent with the FGA and General Plan. The City would need to look to other undeveloped areas of the region to develop for new housing which would be expected to have environmental impacts that have not yet been assessed. The lower density of this alternative would also not meet the minimum number of residential units required for New Urbanism principals that are established in the General Plan for the Plan Area. Overall, this alternative would have a greater impact when compared to the proposed project.

Public Services

New development would place increased demands on public services such as police, fire, schools, parks, libraries, and other governmental services. The WASP project incorporates sites for new schools and parks. A new station will be built within the Central Area Specific Plan to accommodate buildout of the FGA, including the Plan Area. The Plan Area is currently served by Station 6 located at 45 East Bolivar Street. The City has indicated that a new public safety facility is needed to meet the needs of the City in the long-term, although WASP project does not directly trigger the need for a new facility. Additional staff and equipment for fire and police services will be warranted.

Mitigation measures have been incorporated into the project that require payment of impact fees to public service agencies to ensure that the WASP project does not have adverse financial impacts on these agencies. The WASP includes land for schools and parks to ensure the increased demand for these services is met within the Plan Area.

Under the Reduced Residential Intensity/Density Project Alternative, the intensity/density of the residential uses would be reduced by 25 percent; therefore, the demand for police, fire and other public services would be reduced. This alternative would still result in development of public facilities (i.e. schools and parks) and would be required to pay the appropriate public safety impact fees. Overall, this alternative would have a slightly reduced impact to public services when compared to the proposed project.

Transportation and Circulation

Implementation of the WASP would cause an increase in traffic on roadway segments, intersections and ramp junctions that would cause traffic operations to degrade to an unacceptable level of service. Mitigation measures have been incorporated into the project to reduce these traffic impacts to a less than significant level. In some cases, the cumulative traffic conditions on roadway segments, intersections and ramp junctions are anticipated to degrade to an unacceptable level of service. The applicants will be required to make certain traffic improvements and pay traffic impact fees, but some of these cumulative impacts will remain significant and unavoidable.

Under the Reduced Residential Intensity/Density Project Alternative, the intensity/density of the residential uses would be reduced by 25 percent; therefore, traffic generated in the Plan Area would be reduced. This alternative would still result in new traffic improvements on the City's roadway system to accommodate the new traffic generated. It would also still result in payments of traffic impact fees into the City's CIP program that would be used for the roadway system. Existing deficiencies in the traffic system would receive some benefit of improvements to improve existing deficiencies, however, there would still be significant and unavoidable cumulative impacts. Overall, this alternative would have less of an overall traffic impact than the proposed project.

Utilities

Implementation of the WASP could result in potentially significant impacts to the utility systems including wastewater, water, storm water drainage, and solid waste providers. Mitigation measures have been incorporated into the project to ensure that capacity is available and any impacts from increased demand are reduced.

Under the Reduced Residential Intensity/Density Project Alternative, the intensity/density of the residential uses would be reduced by 25 percent; therefore, the total demand for utility services would be reduced. The total quantity of infrastructure installed would also be reduced. The total storm drainage runoff would be slightly reduced due to the reduction in impervious surfaces. Overall, the demand for utilities would be reduced under this alternative when compared to the proposed project.

SMALLER-SCALE PROJECT ALTERNATIVE

Air Quality

As a result of development in Monterey County the North Central Coast Air Basin (NCCAB) would continue to experience increases in criteria pollutants. Monterey County has a state designation of nonattainment for ozone and PM_{10}, and is either unclassified or attainment for all other criteria pollutants. The County has a national designation of unclassified or attainment for all criteria pollutants.

The WASP would result in increased emissions primarily from area source and mobile source emissions associated with project implementation. The MBARD has established operations related emissions thresholds of significance and it was determined that annual unmitigated emissions of ROG, NOx, and PM_{10} exceed the MBARD thresholds of significance. Even with basic mitigation incorporated into the model, the WASP project would exceed the thresholds of significance for these criteria pollutants.

The MBARD's *CEQA Air Quality Guidelines* provides a list of mitigation measures that would help the proposed project comply with the MBARD's *2008 AQMP* and the *Triennial Plan Revision 2009-2011*. As is currently proposed, the WASP is expected to be built out under a staged approach, and all mitigation would be applicable to each phase. However, even with the application of these and other mitigation measures, operational emissions levels would remain above the defined thresholds of significance and it was determined that the WASP would have a *cumulatively considerable contribution* and *significant and unavoidable* impact on the region's air quality.

Under the Smaller-scale Project Alternative, the overall size of the project would be scaled down by approximately 33 percent as compared with the proposed project. This would reduce the overall air quality emissions under area source, mobile source, and energy source. As such, this impact would be reduced when compared to the proposed project.

Biological Resources

There are various biological resources, including habitat, that occurs throughout the region. The Plan Area is intensively cultivated and provides little to no habitat for most special status species. Nevertheless, there remains a potential that special status species could occupy the Plan Area from time to time. Mitigation measures incorporated into the WASP project are intended to avoid, minimize, and compensate for direct and indirect effects to biological resources, including special status species and their habitats.

The WASP project will eliminate the onsite irrigation ditches, which provide some, but relatively little habitat quality. The WASP project is anticipated to eliminate the roadside ditches located along East Boronda Road and San Juan Grade Road. These ditches also provide some, but relatively little habitat quality. Mitigation measures incorporated into the WASP project are intended to ensure that any fill activities are authorized by the appropriate regulatory agencies prior to disturbance. The permit process ensures that minimization and compensation is incorporated into the activity.

The WASP project will change the habitat type from an open agricultural field to an urban developed area. Urban development will provide habitat for a variety of species; however, it will be lower quality habitat then the current agricultural land. While the City has evaluated urban development in the Plan Area extensively through the General Plan and FGA process, and subsequently determined that urban development in this location is appropriate, the physical change is not reversible and there are no mitigation measures that can fully mitigate this impact. implementation of the WASP would have a cumulatively considerable contribution and significant and unavoidable impact to biological resources.

Under the Smaller-scale Project Alternative, an area of about 264 acres would not be developed. Therefore, a smaller amount of habitat would be removed, and fewer ground disturbing activities would occur, as compared with the proposed project. Therefore, there would be a reduced potential for impacts to biological resources under the Smaller-scale Project Alternative as compared with the proposed project.

Cultural Resources

No cultural resources were identified within the WASP Plan Area, according to maps and files maintained by the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS), and three previous cultural resource inventories, which have examined the area. As with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of a previously unknown cultural and/or historical resource or human remains. Implementation of the mitigation measures incorporated into this EIR would reduce impacts associated with unknown cultural resources where they to be found.

The Smaller-scale Project Alternative would result in a reduced level of ground disturbing activities and would therefore have slightly less potential to disturb or destroy cultural, historic, and archaeological resources, as well as paleontological resources. While the WASP is not anticipated to result in significant impacts to cultural resources with mitigation, this alternative would result in slightly less potential for impacts to cultural resources.

Greenhouse Gases and Climate Change

Given the size and scope of development of the WASP, both construction and operational GHG emissions generated by development of the WASP are expected to have a significant impact on the environment. The overall annual GHG emissions associated with the WASP would be reduced with mitigation. However, even with mitigation applied, the WASP would exceed the construction and operational thresholds established for the proposed project. However, with mitigation, the WASP would not conflict with the applicable GHG-related plans, policies, and regulations. Nevertheless, the WASP would have an individual and cumulative impact related to greenhouse gases and climate change that is significant and unavoidable.

The Smaller-scale Project Alternative would reduce the level of development by approximately 33 percent as compared with the proposed project. The smaller number of residential units under this alternative would reduce greenhouse gas emissions, but the per capita emissions would be expected to be the same. This level of overall energy usage would be reduced. Overall VMT is

expected to lower as compared to the proposed project. As such, this impact would be less when compared to the proposed project.

Hazards and Hazardous Materials

The Plan Area is currently agricultural land, used extensively for the cultivation of lettuce, cauliflower, broccoli, and strawberries. Several small clusters of buildings located on the northern, western, and eastern edges of the Plan Area include residences, barns, warehouses, and storage yards. These structures have supported the agricultural operations and some have been used or are currently being used to temporarily store fertilizers, pesticides, herbicides and other materials normally associated with ongoing agricultural cultivation.

Due to the long-term use of the land for agricultural purposes, the site has the potential for certain environmental conditions related to pesticide and herbicide application that could have caused these chemicals to be present in the soil. The Phase 1 Environmental Site Assessment (ESA) identified the following chemicals in connections with the Project site: OCPs, arsenic, PCBs, and TPH. Additionally, the WASP includes components which would likely use a variety of hazardous materials including: paints, cleaners, and cleaning solvents.

There would be a risk of release of these materials into the environment if they are not stored and handled in accordance with best management practices approved by Environmental Health Division of the County of Monterey Health Department. However, implementation of the mitigation measures identified within this EIR would minimize the potential for an impact.

The Smaller-scale Project Alternative would reduce the level of development by approximately 33 percent and the potential for exposure to hazardous materials, or a release of hazardous materials would be reduced proportionately. Ongoing pesticide use would occur within the area to remain in agriculture, and this would have the potential to generate negative health effects on new residents in the development. Similar to the proposed project, new development would introduce new sensitive receptors into an area that contains land that has historically utilized chemicals for agricultural production. Any negative health effects associated with the residuals of these chemicals would be alleviated through compliance with state and federal regulations that require remediation when above certain thresholds. There would be a long-term potential for hazards associated with use and generation of household and commercial hazardous wastes, although compliance with state and federal regulations would be required. While the WASP is not anticipated to result in significant impacts associated with hazards and hazardous materials, the Smaller-scale Project Alternative would result in slightly less potential for impacts.

Hydrology and Water Quality

Implementation of the WASP has the potential to result in the violation of water quality standards and waste discharge of pollutants into surface waters during both construction and long-term operations. Construction operations could result in temporary increases in runoff, erosion, sedimentation, soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas. The long-term operation of the WASP could result in long-term impacts to surface water quality from urban

stormwater runoff and could enter groundwater or surface water systems. Additionally, the proposed project would result in new impervious surfaces that could reduce rainwater infiltration and groundwater recharge. Mitigation measures incorporated into the project would reduce potential water quality impacts to a less than significant level. The WASP would not place persons or structures in a flood hazard zone.

Under the Smaller-scale Project Alternative, potential water quality impacts from construction and operation would be reduced. Under this alternative, the overall level of development (including the size of the site and the overall development area per use) would be reduced by approximately 33 percent. An area of approximately 264 acres that would developed as part of the proposed project would not be developed as part of this alternative. Groundwater recharge would occur at a greater level under this alternative as compared with the proposed project. As such, potential impacts related to hydrology and water quality would be reduced under the Smaller-scale Project Alternative when compared to the WASP.

Noise

Some existing noise-sensitive receptors located near the Plan Area are currently exposed to exterior traffic noise levels exceeding the 60 dB L_{dn} exterior noise level standard for residential uses. In some locations, the noise levels are predicted to increases to levels that would trigger a new exceedance of the 60 dB L_{dn} exterior noise level standard, or exceed the FICON allowable increase criteria. A mitigation measure has been incorporated into the project to ensure that the project applicant consider repaving affected roadway segments, which is anticipated to reduce traffic noise levels along affected roadways.

The proposed project has the potential to expose new sensitive receptors to excessive noise. Several mitigation measures have been incorporated into the project to ensure that the potential noise impacts to new sensitive receptors is mitigated. For instance, there are measures that require sound walls and/or landscaped berms as a form of attenuation for traffic noise. There are also measures that address stationary sources (i.e. generators, mechanical equipment, etc.) to ensure that they do not adversely affect sensitive receptors. Lastly, there are measures that address business operations (i.e. loading docks, truck routes, etc.) to ensure that they do not adversely affect sensitive receptors.

The proposed project has the potential to increase noise levels and vibration levels associated with construction activities. Mitigation measures have been incorporated into the project to require construction activities that limit construction to the least noise sensitive times of the day/week, and to ensure that all equipment would be fitted with factory-equipped mufflers.

Under the Smaller-scale Project Alternative, the overall level of development would be reduced by 33 percent as compared with the proposed project. As a result of less development, noise levels associated with traffic, stationary sources, and construction would be expected to be reduced under this alternative. As such, this alternative would have less impact relative to the proposed project.

Population and Housing

The City anticipates growth within the community over time, and has responded to the anticipated growth by establishing a Future Growth Area (FGA). The FGA was established through a community process that focuses on allowing new development to specific areas of the city that have been determined to have adequate infrastructure and resources to accommodate the growth. The Plan Area is within the FGA, and is a WASP is a planning document that implements the City's intent to focus new development, and the growth that goes along with the new development, into the FGA. The WASP would not displace substantial numbers of existing housing and/or substantial numbers of people, but would instead provide new housing consistent with the City's General Plan. The WASP does not divide the community, but rather, it is an extension of the existing community.

Under the Smaller-scale Project Alternative, the overall level of development would be reduced by 33 percent as compared with the proposed project. Development of housing would still occur under this alternative, but fewer units would be built. Growth would still be anticipated to occur within the region, but it would not be fully accommodated in the FGA which has undergone extensive planning efforts by the City and community for over a decade. This would not be consistent with the FGA and General Plan. The City would need to look to other undeveloped areas of the region to develop for new housing which would be expected to have environmental impacts that have not yet been assessed. Overall, this alternative would have a greater impact when compared to the proposed project.

Public Services

New development would place increased demands on public services such as police, fire, schools, parks, libraries, and other governmental services. The WASP project incorporates sites for new schools and parks. A new station will be built within the Central Area Specific Plan to accommodate buildout of the FGA, including the Plan Area. The Plan Area is currently served by Station 6 located at 45 East Bolivar Street. The City has indicated that a new public safety facility is needed to meet the needs of the City in the long-term, although WASP project does not directly trigger the need for a new facility. Additional staff and equipment for fire and police services will be warranted.

Mitigation measures have been incorporated into the project that require payment of impact fees to public service agencies to ensure that the WASP project does not have adverse financial impacts on these agencies. The WASP includes land for schools and parks to ensure the increased demand for these services is met within the Plan Area.

Under the Smaller-scale Project Alternative, the overall level of development and the number of residential/non-residential uses would be reduced be 33 percent; therefore, the demand for police, fire and other public services would be reduced. This alternative would still result in development of public facilities (i.e. schools and parks) and would be required to pay the appropriate public safety impact fees. Overall, this alternative would have a slightly reduced impact to public services when compared to the proposed project.

Transportation and Circulation

Implementation of the WASP would cause an increase in traffic on roadway segments, intersections and ramp junctions that would cause traffic operations to degrade to an unacceptable level of service. Mitigation measures have been incorporated into the project to reduce these traffic impacts to a less than significant level. In some cases, the cumulative traffic conditions on roadway segments, intersections and ramp junctions are anticipated to degrade to an unacceptable level of service. The applicants will be required to make certain traffic improvements and pay traffic impact fees, but some of these cumulative impacts will remain significant and unavoidable.

Under the Smaller-scale Project Alternative, the overall level of development and the number of residential/non-residential uses would be reduced be 33 percent; therefore, traffic generated in the Plan Area would be reduced. This alternative would still result in new traffic improvements on the City's roadway system to accommodate the new traffic generated. It would also still result in payments of traffic impact fees into the City's CIP program that would be used for the roadway system. Existing deficiencies in the traffic system would receive some benefit of improvements to improve existing deficiencies, however, there would still be significant and unavoidable cumulative impacts. Overall, this alternative would have less of an overall traffic impact than the proposed project.

Utilities

Implementation of the WASP could result in potentially significant impacts to the utility systems including wastewater, water, storm water drainage, and solid waste providers. Mitigation measures have been incorporated into the project to ensure that capacity is available and any impacts from increased demand are reduced.

Under the Smaller-scale Project Alternative, the overall level of development and the number of residential/non-residential uses would be reduced be 33 percent; therefore, the total demand for utility services would be reduced. The total quantity of infrastructure installed would also be reduced. The total storm drainage runoff would be slightly reduced due to the reduction in impervious surfaces. Overall, the demand for utilities would be reduced under this alternative when compared to the proposed project.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that an environmentally superior alternative be identified among the alternatives that are analyzed in the EIR. If the No Project (No Build) Alternative is the environmentally superior alternative, an EIR must also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)). The environmentally superior alternative is that alternative with the least adverse environmental impacts when compared to the proposed project.

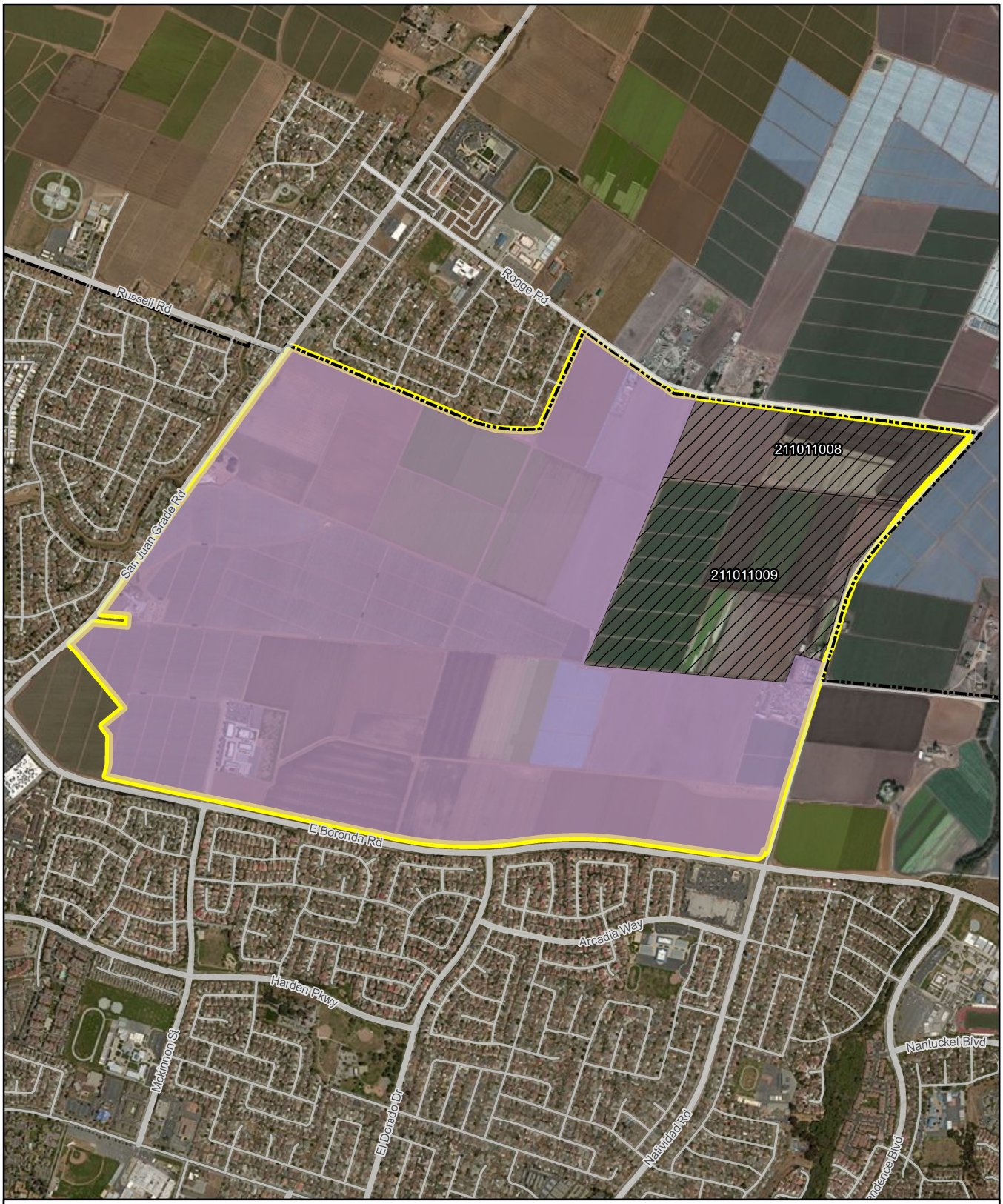
Table 5.0-2 presents a comparison of the alternative project impacts with those of the WASP. As shown in the table, the No Project Alternative is the environmentally superior alternative because is results in the least verse environmental impacts when compared to the proposed project. The

Smaller-scale Project Alternative is the next best alternative. It ranks equal or better than the proposed project for every environmental issue. In addition, in aggregate, the Reduced Land Area Project Alternative, and the Reduced Residential Intensity/Density Project Alternative rank higher than the proposed project. It should be noted that the Reduced Residential Intensity/Density Alternatives does not meet all of the project objectives. Additionally, the reduced number of residential units in the Reduced Residential Intensity/Density Alternative would be inconsistent with the General Plan standards for the Plan Area, and would not meet the minimum number of residential units required for New Urbanism.

TABLE 5.0-2: COMPARISON OF ALTERNATIVE PROJECT IMPACTS TO THE WASP

ENVIRONMENTAL ISSUE	*NO PROJECT (NO BUILD) ALTERNATIVE*	*REDUCED LAND AREA PROJECT ALTERNATIVE*	*REDUCED RESIDENTIAL INTENSITY/DENSITY ALTERNATIVE*	*SMALLER-SCALE PROJECT ALTERNATIVE*
Air Quality	Less	Slightly Less	Less	Less
Biological Resources	Less	Less	Equal	Less
Cultural Resources	Slightly Less	Slightly Less	Equal	Slightly Less
Greenhouse Gases and Climate Change	Less	Slightly Less	Less	Less
Hazards and Hazardous Materials	Less	Slightly Less	Slightly Less	Slightly Less
Hydrology and Water Quality	Less	Less	Slightly Less	Less
Noise	Less	Less	Less	Less
Population and Housing	Greater	Greater	Greater	Greater
Public Services	Slightly Greater	Slightly Less	Slightly Less	Slightly Less
Transportation and Circulation	Less	Less	Less	Less
Utilities	Less	Less	Less	Less

GREATER/SLIGHTLY GREATER = GREATER IMPACT THAN THAT OF THE WASP
LESS/SLIGHTLY LESS = LESS IMPACT THAN THAT OF THE WASP
EQUAL = NO SUBSTANTIAL CHANGE IN IMPACT FROM THAT OF THE WASP



Legend

- City of Salinas
- West Area Specific Plan
- Reduced Land Area Alternative
- Area Excluded from West Area Specific Plan under the Reduced Land Area Alternative

N

0 500 1,000

Feet

1:18,000

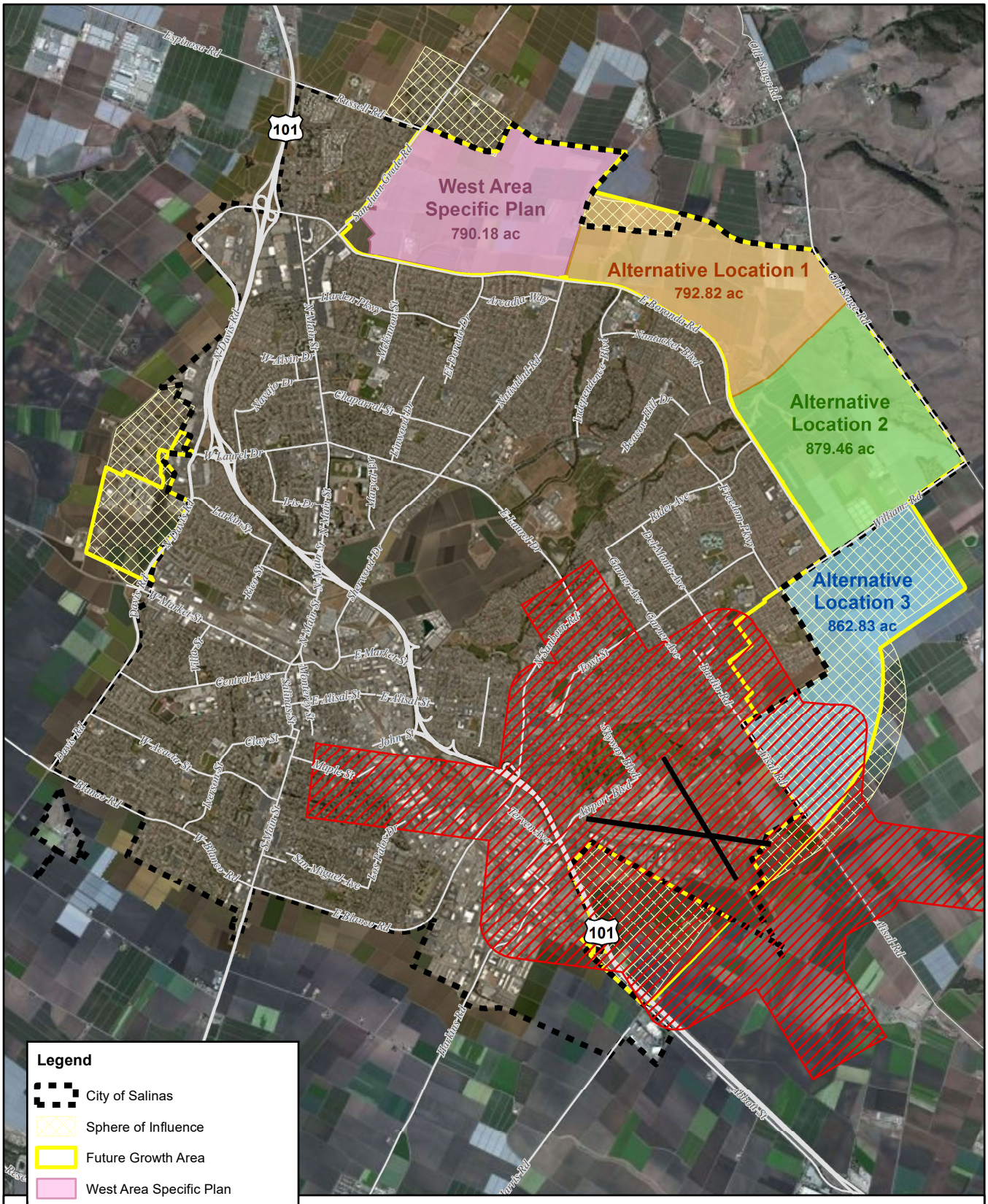
Sources: Monterey County GIS. Map date: June 20, 2016.

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 5.0-1: Reduced Land Area Alternative

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.



CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 5.0-2: Alternative Project Locations Considered but Rejected

Sources: Monterey County GIS, City of Salinas GIS. Map date: February 25, 2016.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.

REPORT PREPARERS

City of Salinas

Tara Hullinger.....Planning Manager

Jill Miller.....Senior Planner/Project Manager

Andre Easterling, PE, TE.....Traffic Engineer

James Serrano.....Transportation Planner

Gabriel Elliott.....Project Manager (Former)

De Novo Planning Group

Ben Ritchie.....Principal Planner/Project Manager

Steve McMurtry.....Principal Planner/Co-Project Manager

Beth Thompson.....Principal Planner

Amanda Tropiano.....Principal Planner

Martti Eckert.....Senior Planner

Megan Thorne.....Senior Planner

Elise Carroll.....Associate Planner

William Crenshaw.....Associate Planner

Josh Smith.....Associate Planner

REPORT CONTRIBUTORS

Fehr and Peers

Fred Choa, P.E .....Principal Engineer

Bill Burton.....Senior Associate

Rebecca Shafer.....Transportation Engineer / Planner

JC Brennan & Associates – Noise Consultant

Luke Saxelby, INCE Bd. Cert.....Senior Consultant

Peak & Associates – Cultural Consultant

Melinda Peak.....President

Robert A. Gerry.....Senior Archeologist

Balance Hydrologics

Benjamin Roberts, PhD, P.E. ..... Senior Hydraulic Engineer

Edward D. Ballman, P.E. ..... Principal Civil Engineer

Geocon

Dan Easter, PG, CEG .....Senior Geologist

Jim Brake, PG .....Senior Geologist

Association of Monterey Bay Area Governments (AMBAG). 2014. 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy and Regional Transportation Plans for Monterey, San Benito, and Santa Cruz Counties.

Association of Monterey Bay Area Governments (AMBAG). 2014. Appendix A: Regional Growth Forecast. Available: http://ambag.org/programs/met_transp_plann/documents/Draft_2035_MTP_SCS/Appendix%20A.pdf

Balance Hydrologics. 2016. Hydrology and Water Technical Study for West Area Specific Plan EIR.

Barbour and Major. 1988. Terrestrial vegetation of California.

Bureau of Labor Statistics: unemployment statistics. Available: http://www.bls.gov

C. Donald Ahrens. 2006. Meteorology Today: An Introduction to Weather, Climate, & the Environment.

California Air Pollution Control Officers Association (CAPCOA). 2010. Quantifying Greenhouse Gas Mitigation Measures. Available: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

California Air Pollution Control Officers Association (CAPCOA). 2017. CalEEMod version 2016.3.2. November 2017. Available: http://www.caleemod.com/.

California Air Resources Board (CARB). 2005. Air Quality and Land Use Handbook: A Community Health Perspective. Available: https://www.arb.ca.gov/ch/landuse.htm

California Air Resources Board (CARB). 2014a. 2020 Statewide Greenhouse Gas Emissions and the 2020 Target. Available: https://www.arb.ca.gov/cc/inventory/data/misc/2020_forecast_base0911_2015-01-22.pdf

California Air Resources Board (CARB). 2014b. First Update to the Climate Change Scoping Plan. May 2014. Available: https://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf

California Air Resources Board (CARB). 2016a. California Greenhouse Gas Emission Inventory – 2016 Edition. Available: https://www.arb.ca.gov/cc/inventory/data/data.htm

California Air Resources Board (CARB). 2016b. California Climate Strategy. January 29, 2016. Available: http://docketpublic.energy.ca.gov/PublicDocuments/15-RETI-02/TN210091_20160129T154626_California_Climate_Strategy_CARB_for_RETI_20_Plenary_Meeting_on.pdf

7.0 REFERENCES

California Air Resources Board (CARB). 2017a. California Ambient Air Quality Standards (CAAQS). Available: http://www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm

California Air Resources Board (CARB). 2017b. Area Designations Map/State and National. Available: http://www.arb.ca.gov/desig/adm/adm.htm. Last Reviewed October 18, 2017.

California Air Resources Board (CARB). 2017c. California's 2017 Climate Change Scoping Plan. November 2017. Available: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf

California Air Resources Board (CARB). 2018a. ARB Databases: Aerometric Data Analysis and Management System (ADAM). Available: http://www.arb.ca.gov/html/databases.htm. Accessed in May 2018.

California Air Resources Board (CARB). 2018b. EMFAC2014 Web Database. Available: https://www.arb.ca.gov/emfac/2014/

California American Water. 2012. 2010 Urban Water Management Plan for the Central Division – Monterey County District.

California Climate Change Center. 2006. Our Changing Climate: Assessing the Risks to California.

California Department of Conservation, Division of Oil, Gas & Geothermal Resources. 2016. DOGGR. Available: http://maps.conservation.ca.gov/doggr/index.html#openModal. Accessed March 21.

California Department of Education (DOF). Statistics and Data Files. 2014-2015 (DataQuest). Available: http://www.cde.ca.gov/

California Department of Education (DOF). 2015. School Quality Snapshot. Available: http://www.cde.ca.gov/ta/ac/sq/.

California Department of Finance (DOF). 2016. Reports and Research Papers. Available: http://www.dof.ca.gov/research/demographic/reports/

California Department of Toxic Substances Control. 2016. EnviroStor. Accessed March 21. Available: http://www.envirostor.dtsc.ca.gov/public/

California Department of Transportation (Caltrans). 2011. Officially Designated State Scenic Highways. Available: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/.

California Department of Transportation (Caltrans). 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol. September 2013. Available: http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013B.pdf

California Department of Transportation (Caltrans). 2014. Air Quality Conformity Analysis Annotated Outline. Posted 2/12/2016. Available: http://www.dot.ca.gov/ser/forms.htm

California Department of Water Resources (DWR). 2003. California Groundwater Update 2003, Central Coast Hydrologic Region.

California Department of Water Resources (DWR). 2013. California's Groundwater Bulletin 118. Available: http://www.water.ca.gov/pubs/groundwater/bulletin_118/california's_groundwater__bulletin_118_-_update_2003_/bulletin118-cover.pdf

California Department of Water Resources. 2016. California Irrigation Management Information System (CIMIS), Salinas North Station ID #116. Data for February 2015 – January 2016.

California Energy Commission (CEC). 2012. Energy Almanac. Retrieved August 2012. Available: http://energyalmanac.ca.gov/overview/index.html

California Energy Commission (CEC). 2013. Available: http://www.energy.ca.gov/title24/2013standards/rulemaking/documents/2013_Building_Energy_Efficiency_Standards_FAQ.pdf

California Energy Commission (CEC). 2014. California Energy Consumption Database. Available: http://ecdms.energy.ca.gov/elecbycounty.aspx

California Energy Commission (CEC). 2015. 2016 Building Energy Efficiency Standards Adoption Hearing. June 10, 2015.

California Energy Commission (CEC). 2016. California Greenhouse Gas Emission Inventory – 2016 Edition. Available at: https://www.arb.ca.gov/cc/inventory/data/data.htm

California Energy Commission (CEC). 2017. California Energy Commission – Tracking Progress. Available at: http://www.energy.ca.gov/renewables/tracking_progress/documents/renewable.pdf

California Environmental Protection Agency. 2010. Climate Action Team Report to Governor Schwarzenegger and the Legislature. December 2010. Available: http://www.climatechange.ca.gov/climate_action_team/reports/

California Public Utilities Commission (CPUC). 2018. California Renewables Portfolio Standard (RPS). Available: http://www.cpuc.ca.gov/RPS_Homepage/

California State Water Resources Control Board (SWRCB). 2017. November 2016 Supplier Conservation Compliance. Available: http://www.waterboards.ca.gov/water_issues/programs/conservation_portal/docs/2017jan/suppliercompliance_010417.pdf

California Water Service Company (Cal Water) – Salinas District. 2011. 2010 Urban Water Management Plan Salinas District. Available: https://www.calwater.com/docs/uwmp/sln/2010_Urban_Water_Management_Plan_%28SLN%29.pdf

California Water Service Company (Cal Water) - Salinas District. 2015. California SB 610 Water Supply Assessment (WSA). December 15, 2015.

California Water Service Company (Cal Water) – Salinas District. 2016. 2015 Urban Water Management Plan Salinas District. June 2016. Available: https://www.calwater.com/docs/uwmp2015/sln/2015%20Urban%20Water%20Management%20Plan%20Public%20Draft%20(SLN).pdf

CalRecycle. 2014. Jurisdiction Diversion/Disposal Rate Detail. Available: http://www.calrecycle.ca.gov/LGCentral/Reports/DiversionProgram/JurisdictionDiversionDetail.aspx?JurisdictionID=629&Year=2014

CalRecycle. 2015. Facility/Site Summary Details: Johnson Canyon Sanitary Landfill (27-AA-0005). Available: http://www.calrecycle.ca.gov/SWFacilities/Directory/27-AA-0005/Detail/

Casagrande & Watson. 2007. The Carr Lake Project: Potential Biophysical Benefits of Conversion to a Multiple-Use Park, CSU Monterey Bay.

Casagrande, J. and F. Watson. 2006. Reclamation Ditch Watershed Assessment and Management Strategy: Part A - Watershed Assessment. Monterey County Water Resources Agency and The Watershed Institute, California State University Monterey Bay, 283 pp.

Castillo, Edward D. 1978. The impact of Euro-American exploration and settlement. In California, edited by Robert F. Heizer, pp. 99-127. Handbook of North American Indians. vol. 8, William G. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

CDM. 2004. Salinas City Storm Water Master Plan. May 2004.

Center for Watershed Sciences UC Davis. 2012. Technical Report 4: Groundwater Nitrate Occurrence with a focus on Tulare Lake Basin and Salinas Valley Groundwater, California Nitrate Project. July 2012.

Central Coast Regional Water Quality Control Board. 2012. NPDES M4 Permit for City of Salinas, Order R3-2012-0005. May 2012.

Central Coast Regional Water Quality Control Board. 2012. Order R3-2012-0005; NPDES No. CA0049981. Available: http://www.waterboards.ca.gov/rwqcb3/water_issues/programs/stormwater/docs/salinas/2012_0005_salinas_permit.pdf

Central Coast Regional Water Quality Control Board. 2014. Order R3-2014-0013; NPDES No. CA0048551. Available: http://www.waterboards.ca.gov/centralcoast/board_decisions/adopted_orders/2014/2014_0013_npdes.pdf

Central Intelligence Agency (CIA). 2009. The World Factbook 2009. Available: https://www.cia.gov/library/publications/download/download-2009/

City of Salinas Fire Department. Accessed 2016. Available: http://www.ci.salinas.ca.us/services/fire/fire.cfm

City of Salinas. 2002. City of Salinas General Plan. September 2002. https://www.cityofsalinas.org/sites/default/files/departments_files/community_development_files/general_plan_files/generalplan.pdf

City of Salinas. 2002. City of Salinas General Plan Final Program EIR. August 2002.

City of Salinas. 2002. Salinas Bikeways Plan 2002. Available: https://www.cityofsalinas.org/sites/default/files/departments_files/public_works_files/salinas_bikeways_plan_0_0.pdf

City of Salinas. 2004. City of Salinas Storm Water Master Plan. May 2004. Available: http://www.ci.salinas.ca.us/services/engineering/pdf/salinas_storm_water_master_plan.pdf

City of Salinas. 2007. Sphere of Influence Amendment and Annexation August 2007 Initial Study. August 2007.

City of Salinas. 2008. City of Salinas Stormwater Management Plan. Available: http://www.ci.salinas.ca.us/services/maintenance/pdf/SWMP/SWMP-040808-Complete.pdf

City of Salinas. 2009. City of Salinas Park and Sports Facility Standards. Public Review Draft. February 2009. http://www.ci.salinas.ca.us/documents.cfm

City of Salinas. 2009. Draft Program Environmental Impact Report, Salinas Ag-Industrial Center (SCH#2008041171). July 13, 2009.

City of Salinas. 2011. City of Salinas Sanitary Sewer System Master Plan. August 2011.

City of Salinas. 2012. Stormwater Management Plan. May 2012.

City of Salinas. 2012. Zoning Map. March 2012. Available: http://www.ci.salinas.ca.us/services/commdev/pdf/SalinasZoningMap.pdf

City of Salinas. 2013. Stormwater Standards for New and Redevelopment Projects. December 2013.

City of Salinas. 2013. Stormwater Development Standards for New Development and Redevelopment Projects (RBF Consulting). December 2013.

City of Salinas. 2013. Stormwater Management Plan Update. July 2, 2013.

City of Salinas. 2014. Public Facilities Impact Fee Study for Fire, Police, Library, and Recreation Services. February 2014. Available: file:///C:/Users/William/Downloads/City%20of%20Salinas%20Public%20Facilities%20Impact%20Fee%20Study%20-%20v7%20(Feb%202014).pdf.pdf

City of Salinas. 2014. Salinas Police Department Annual Report 2014. Available: http://www.salinaspd.com/sites/default/files/spd_ar_2014_web.pdf

City of Salinas. 2014. Sewer System Management Plan: Sanitary Sewer Collection System. Available: http://www.ci.salinas.ca.us/services/pw/pdf/PublicReview_SanitarySewerManagementPlanUpdate2014.pdf

City of Salinas. 2015. Salinas Housing Element 2015-2023. December 2015. Available: http://www.ci.salinas.ca.us/services/commdev/pdf/Salinas%20revised%20Draft%20%20HE_%20dec%202015.pdf

City of Salinas. 2016. Library Services. Available: http://www.ci.salinas.ca.us/services/library/locations.cfm

City of Salinas. 2016. Parks & Community Services. Information on parks and recreation. Available: http://www.ci.salinas.ca.us/services/recreation/parks.cfm

City of Salinas. 2016. Salinas Police Department. Annual Report Pers Comm Deputy Chief David Shaw. March 2016.

City of Salinas. 2016. Salinas Police Department. Salinas Police Department Crime Statistics. Available: http://www.salinaspd.com/content/statistics

Cloverdale Management. 2010. Salinas Retail Project East Boronda Road & San Juan Grade Road – Stormwater Report. Wood Rogers. December 2010.

Community and Economic Development. 2005. City of Salinas Sphere of Influence – Storm Drain Study. P&D Consultants, April 2005.

Cox, St. John 1877 Map of Monterey County. T.C Markely, New York.

Creekbridge Homes. 2007. Regional Watershed Analysis – Hydrologic Mitigation, Pacific Advanced Civil Engineering. March 2007.

Davis, Ellis A. 1941. Davis' Commercial Encyclopedia of the Pacific Southwest: California, Nevada, Utah, Arizona. Ellis A. Davis, Oakland.

California Department of Finance (DOF). 2017. E-5 tables. 2011-2017.

Elliott & Moore. 1881. History of Monterey County, California. Elliott & Moore, Publishers. Facsimile Reproduction by Valley Publishers, Fresno.

ENVIRON. 2013. Appendix A: Calculation Details for CalEEMod. Available: http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf?sfvrsn=2

EMC Planning Group. 2017. Draft Program EIR City of Salinas Economic Development Element. State Clearinghouse No. 2015111036. September 1, 2017

Federal Emergency Management Agency (FEMA). 2009. Flood Insurance Rate Map Numbers 06053C0207G, 06053C0209G, 06053C0228G, and 0653C0226G. April 2009.

Federal Emergency Management Agency (FEMA). 2016. National Flood Insurance Program, Flood Map Service Center. Accessed March 22, 2016. Available: https://msc.fema.gov/portal/search

Fehr & Peers. 2018. Salinas West Area Specific Plan Draft Transportation Impact Analysis. June, 2018.

Fink, Augusta. 1978. Monterey County: The Dramatic Story of Its Past. Valley Publishers, Fresno.

Geocon Project No. S1049-03-01. 2016. Phase I and Limited Screening-level Phase II Environmental Site Assessment (ESA) and Geohazards Study for the Boronda Road Future Growth Area Salinas, California. April 2016.

Guinn, J.M. 1903. History of the State of California and Biographical Record of Santa Cruz, San Benito, Monterey and San Luis Obispo Counties. The Chapman Publishing Company, Chicago.

Hickman, James C. 1993. Jepson Manual: Higher Plants of California.

Inman, et al. 2014. Spatial and Temporal Variations in Water Quality – the Reclamation Ditch and Tembladero Slough. CSU Monterey Bay. December 2014.

Intergovernmental Panel on Climate Change. 2013. "Climate Change 2013: The Physical Science Basis, Summary for Policymakers." Available: http://www.climatechange2013.org/images/report/WG1AR5_SPM_FINAL.pdf

International Energy Agency. 2018. FAQs: Oil. Available: https://www.iea.org/about/faqs/oil/

j.c. brennan & associates, Inc. 2016. West Area Specific Plan (Section 3.7: Noise). December 19, 2016.

Jones, Terry I. and Katherine A. Klar. 2009. California Prehistory. Alta Mira Press, London.

Kasavan Architects. 2011. Stormwater Control Plan for Salinas Union High School District High School #5, RBF Consulting. March 2011.

Kroeber, Alfred L. 1925. Handbook of the Indians of California. *Bureau of American Ethnology Bulletin 78*. Smithsonian Institution, Washington, D.C.

Kulongoski and Belitz. 2007. Ground-water quality data in the Monterey Bay and Salinas Valley Basins, California – Results, USGS Data Series Report 258.

Levy, Richard S. 1978. Costanoan. In *California,* edited by Robert F. Heizer, pp. 485-495. Handbook of North American Indians. vol. 8, William G. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Gateway Center Specific Plan. 2011. IS/MND. July 26, 2011. Pages 74-75: Available: http://www.ci.salinas.ca.us/services/commdev/pdf/GatewayCenterMND_MMRP_IS.pdf

Monterey and San Benito Counties and the State of California. 1910. History and Biographical Record of. Historic Record Company, Los Angeles.

Monterey Bay Air Resources District (MBARD). 2008a. CEQA Air Quality Guidelines. Available: http://mbuapcd.org/pdf/CEQA_full%20%281%29.pdf.

Monterey Bay Air Resources District (MBARD). 2008b. Air Quality Management Plan (AQMP). 2008 AQMP. Available: http://www.mbuapcd.org/mbuapcd/pdf/Planning/2008AirQualityManagementPlan1.pdf.

Monterey Bay Air Resources District (MBARD). 2013. Triennial Plan Revision 2009-2011. Available: http://mbuapcd.org/pdf/Final_Triennial_Plan_Revision_041913.pdf

Monterey Bay Air Resources District (MBARD). 2016a. Phone correspondence with Alan Romero at 2:15pm on 2/25/2016.

Monterey Bay Air Resources District (MBARD). 2016b. Phone correspondence with David Craft at 10:00am on 2/29/2016.

Monterey Bay Air Resources District (MBARD). 2016c. Phone correspondence with David Frisbey at 11:30am on 2/29/2016.

Monterey Bay Air Resources District (MBARD). 2017. Phone and email correspondence with Alan Romero and David Frisbey at 11:00am on 1/27/2017.

Monterey County Board of Supervisors. 2009. Ordinance 5139 – Regulations for Floodplains in Monterey County. October 2009.

Monterey County Resource Management Agency. 2015. State of the Salinas River Groundwater Basin. Brown and Caldwell. January 2015.

Monterey County Water Resources Agency. 2006. Monterey County Groundwater Management Plan. May 2006.

Monterey County Water Resources Agency. 2015. Board of Directors Meeting Monterey County Water Resources Agency. September 28, 2015. Available: http://www.mcwra.co.monterey.ca.us/board_of_directors/slides/2015/9%20BOD%20September%202015.pdf

Monterey County Water Resources Agency. 2015. Floodplain Management Plan. November 2015.

Moran, et al. 2011. California GAMA Special Study: Nitrate Fate and Transport in the Salinas Valley. Lawrence Livermore National Laboratory. March 2011.

Monterey Regional Water Pollution Control Agency (MRWPCA). 2013. Sewer System Management Plan. March 31, 2013. Available: http://www.mrwpca.org/ssmp/MRWPCA_Combined_SSMP_2013_Final.pdf

Monterey Regional Water Pollution Control Agency (MRWPCA). 2016. Email correspondence with Jennifer Gonzalez, Plant Engineer, on 2/25/2016.

National Resources Defense Council (NRDC). 2014. NRDC Fact Sheet: California Snowpack and the Drought. April 2014. Available at: https://www.nrdc.org/sites/default/files/ca-snowpack-and-drought-FS.pdf

National Weather Service (NOAA). 2016. Atlas 14 Point Precipitation Frequency Estimates, Precipitation Frequency Data Server.

Peak and Associates. 2016. Cultural Resource Assessment of the Proposed Project. March 2016.

Rancho San Juan Specific Plan and HYH Property Project EIR. 2014. May 2004 Available: http://www.co.monterey.ca.us/planning/docs/eirs/RSJEIR/Chapter%205.12%20Public%20Services.pdf

Regional Water Quality Control Board, Central Coast Region. Water Quality Control Plan for the Central Coastal Basin. March 2016 Edition.

Salinas Union High School District. 2016. 2016 School Facility Needs Analysis and Justification Report.

Salinas Union High School District. Accessed 2018. Available: http://www.salinasuhsd.org/pages/SUHSD

San Luis Obispo County Air Pollution Control District (SLO County APCD). 2012. CEQA Air Quality Handbook: A Guide for Assessing the Air Quality Impacts for Projects Subject to CEQA Review. April 2012. Available: http://www.slocleanair.org/images/cms/upload/files/CEQA_Handbook_2012_v1.pdf

Santa Rita Union School District. 2016. Personal Comm: Bill Heath Director of Facilities & MOT Santa Rita Union School District February, 2016.

Santa Rita Union School District. 2016. School Facilities Needs Analysis. March 4, 2016.

Sawyer, John and Todd Keeler-Wolf. 1995. A Manual of California Vegetation.

Schaafe and Wheeler Consulting Civil Engineers. 2002. Carr Lake Multi-purpose Flood Control Study, Monterey County Water Resources Agency.

Skinner, Mark W. and Bruce M. Pavlik, Eds. 2001. California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California.

State of California Regional Water Quality Control Board (RWQCB) - Central Coast Region. 2014. Staff Report for Regular Meeting of May 22-23, 2014. Available: http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2014/may/Item_8/item8_stfrpt.pdf

State of California Water Resources Control Board. GeoTracker. Accessed in 2016. Available: www.geotracker.swrcb.ca.gov/

Transportation Research Board. 2010. Highway Capacity Manual. Available: http://hcm.trb.org/?qr=1

United States Army Corps of Engineers (U.S. ACE). 1987. Army Corps of Engineers Wetland Delineation Manual.

United States Census. 2010. Decentential Census 2010. Available: Available: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

United States Climate Data for Salinas CA. 2016. Available: usclimatedata.com

United States Department of Agriculture. 2016. Natural Resources Conservation Service (NRCS). Web Soil Survey. Accessed March 18, 2016. Available: http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm

United States Environmental Protection Agency (U.S. EPA). 2015. National Ambient Air Quality Standards (NAAQS). Available: http://www3.epa.gov/ttn/naaqs/criteria.html#2.

United States Energy Information Administration (U.S. EIA). 2016. California State Energy Profile. Last updated October, 2016. Available: https://www.eia.gov/state/print.cfm?sid=CA

United States Energy Information Administration (U.S. EIA). 2017a. California State Energy Profile. Last updated October 19, 2017. Available: https://www.eia.gov/state/print.php?sid=CA

United States Energy Information Administration (U.S. EIA). 2017b. Total System Electric Generation. Data as of June 23, 2017. Available: http://www.energy.ca.gov/almanac/electricity_data/total_system_power.html

United States Geological Survey. 2015. California Volcano Observatory. Accessed December 8, 2015. Available: http://volcanoes.usgs.gov/observatories/calvo/

United States Geological Survey. 2015. Natividad, California. 7.5-minute Topographic Map.

United States Geological Survey. 2015. Salinas, California. 7.5-minute Topographic Map.

United States Green Building Council. 2016. LEED 2009 for New Construction and Major Renovations. USGBC Member Approved November 2008 (Updated July 2016). Available: https://www.usgbc.org/sites/default/files/LEED%202009%20RS_NC_07.01.14_clean_0.pdf

United States Soil Conservation Service. 1978. Soil Survey of Monterey County, California.

Vernazza Wolfe Associates, Inc. and Baird + Driskell Community Planning. 2016. City of Salinas Nexus Studies Overview and Summary. February 2016. Available: http://www.ci.salinas.ca.us/pdf/temporary/Final%202_12%20-Overview%20and%20Summary.pdf

Watkins, Major Rolan C. 1925. History of Monterey and Santa Cruz Counties, California. The S.J. Clarke Publishing Co., Chicago.

Wood Rogers. 2007. Salinas West Future Growth Area – Stormwater Facility Summary, May 2007. AECOM, City of Salinas WASP Area Specific Plan.

Woodward and Foster. 1997. Erosion and suspended sediment transfer in river catchments: environmental controls, processes and problems, Geography. Vol. 82.

This page left intentionally blank.