PUBLIC DRAFT
INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

FOR THE

VALPICO APARTMENTS PROJECT

OCTOBER 15, 2012

Prepared for:

City of Tracy
Department of Development Services
333 Civic Center Plaza
Tracy, CA 95376

Prepared by:

De Novo Planning Group
4630 Brand Way
Sacramento, CA 95819
(916) 949-3231

De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

PUBLIC DRAFT
INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

FOR THE

VALPICO APARTMENTS PROJECT

OCTOBER 15, 2012

Prepared for:

City of Tracy
Department of Development Services
333 Civic Center Plaza
Tracy, CA 95376

Prepared by:

De Novo Planning Group
4630 Brand Way
Sacramento, CA 95819
(916) 949-3231

TABLE OF CONTENTS

This page left intentionally blank

INITIAL STUDY

PROJECT TITLE

Valpico Apartments Project

LEAD AGENCY NAME AND ADDRESS

City of Tracy
333 Civic Center Plaza
Tracy, CA 95376

CONTACT PERSON AND PHONE NUMBER

Alan Bell, Senior Planner
Development Services Department
City of Tracy
(209) 831-6426

PROJECT SPONSOR'S NAME AND ADDRESS

Valpico Apartments, LLC
1601 Carmen Drive, Suite 211
Camarillo, CA 93010
(805) 469-9510

PURPOSE OF THE INITIAL STUDY

An Initial Study (IS) is a preliminary analysis which is prepared to determine the relative environmental impacts associated with a proposed project. It is designed as a measuring mechanism to determine if a project will have a significant adverse effect on the environment, thereby triggering the need to prepare an Environmental Impact Report (EIR). It also functions as an evidentiary document containing information which supports conclusions that the project will not have a significant environmental impact or that the impacts can be mitigated to a "Less Than Significant" or "No Impact" level. If there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, the lead agency shall prepare a Negative Declaration (ND). If the IS identifies potentially significant effects, but: (1) revisions in the project plans or proposals would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and (2) there is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment, then a Mitigated Negative Declaration (MND) shall be prepared.

This Initial Study has been prepared consistent with CEQA Guidelines Section 15063, to determine if the proposed Valpico Apartments Project (project) may have a significant effect upon the environment. Based upon the findings and mitigation measures contained within this report, a Mitigated Negative Declaration (MND) will be prepared.

PROJECT LOCATION AND SETTING

PROJECT LOCATION

The project site consists of approximately 8.75 acres located in the northwest quadrant of the intersection of South MacArthur Drive and Valpico Road in the southern portion of the City of Tracy. The project site includes APNs 246-140-013 and 014.

The project's regional location is shown in Figure 1 and the project area and site boundary are shown in Figure 2.

EXISTING SITE USES

The project site is currently vacant. Landscaping trees are located along the southern and western edges of the project site.

SURROUNDING LAND USES

Lands to the south and east of the project site consist of single-family residential uses. There is a Rite Aid store located immediately east of the project site, along the project site's eastern boundary. The parcel immediately west of the project site has a single home, and is otherwise vacant. The parcel adjacent to the west is designated Residential High by the City's General Plan and is currently the subject of a separate development application for the development of a 60-unit residential apartment project. Commercial, industrial, and vacant land uses are located further to the west of the project site. The parcel to the north of the project site is mostly vacant, with the exception of a single residential structure and accessory buildings. Single-family residential land uses are located further north of the project site.

GENERAL PLAN AND ZONING DESIGNATIONS

The project site is currently designated Commercial by the City of Tracy General Plan Land Use Designations Map and is zoned Community Shopping.

PROJECT DESCRIPTION

The proposed project would develop 184 multi-family housing units on the 8.75-acre project site. The project would consist of seven, three-story buildings with 24 apartment units in each building, plus 16 rental townhomes in six buildings of two stories each. Parking would be located throughout the site, adjacent to the apartment buildings. A total of 362 parking spaces would be provided, approximately half of which would be covered.

The project would include a leasing office, swimming pool, sidewalks, a bike path, and landscaping improvements throughout the site.

Glenbriar Drive currently terminates at the south side of Valpico Road, southwest of the project site. The project applicant would construct a new segment of Glenbriar Drive, running north-south, along the western edge of the site. There would be two access points to the western side of the project site from the newly constructed segment of Glenbriar Drive. An additional site

access point would be provided from Valpico Road, near the southeastern corner of the project site. The proposed site plan is shown on Figure 3. The proposed project includes a request for a General Plan Amendment to designate the site Residential High, and a zoning change to zone the site High Density Residential.

REQUESTED ENTITLEMENTS AND OTHER APPROVALS

The City of Tracy is the Lead Agency for the proposed project, pursuant to the State Guidelines for Implementation of the California Environmental Quality Act (CEQA), Section 15050.

This document will be used by the City of Tracy to take the following actions:

- Adoption of the Mitigated Negative Declaration (MND)
- Adoption of the Mitigation Monitoring and Reporting Program (MMRP)
- Approval of a General Plan Amendment from Commercial to the Residential High land use designation (GPA12-0001)
- Approval of site rezoning from Community Shopping Center to High Density Residential (R12-0001)
- Tracy Municipal Code Amendment (Section 10.08.1610(d)) changing the minimum distance between main buildings in the High Density Residential Zone from "the average height of the two main buildings" to a distance as close as six feet. (ZA12-0004)
- Development Review (D12-0004)

The following agencies may be required to issue permits or approve certain aspects of the proposed project:

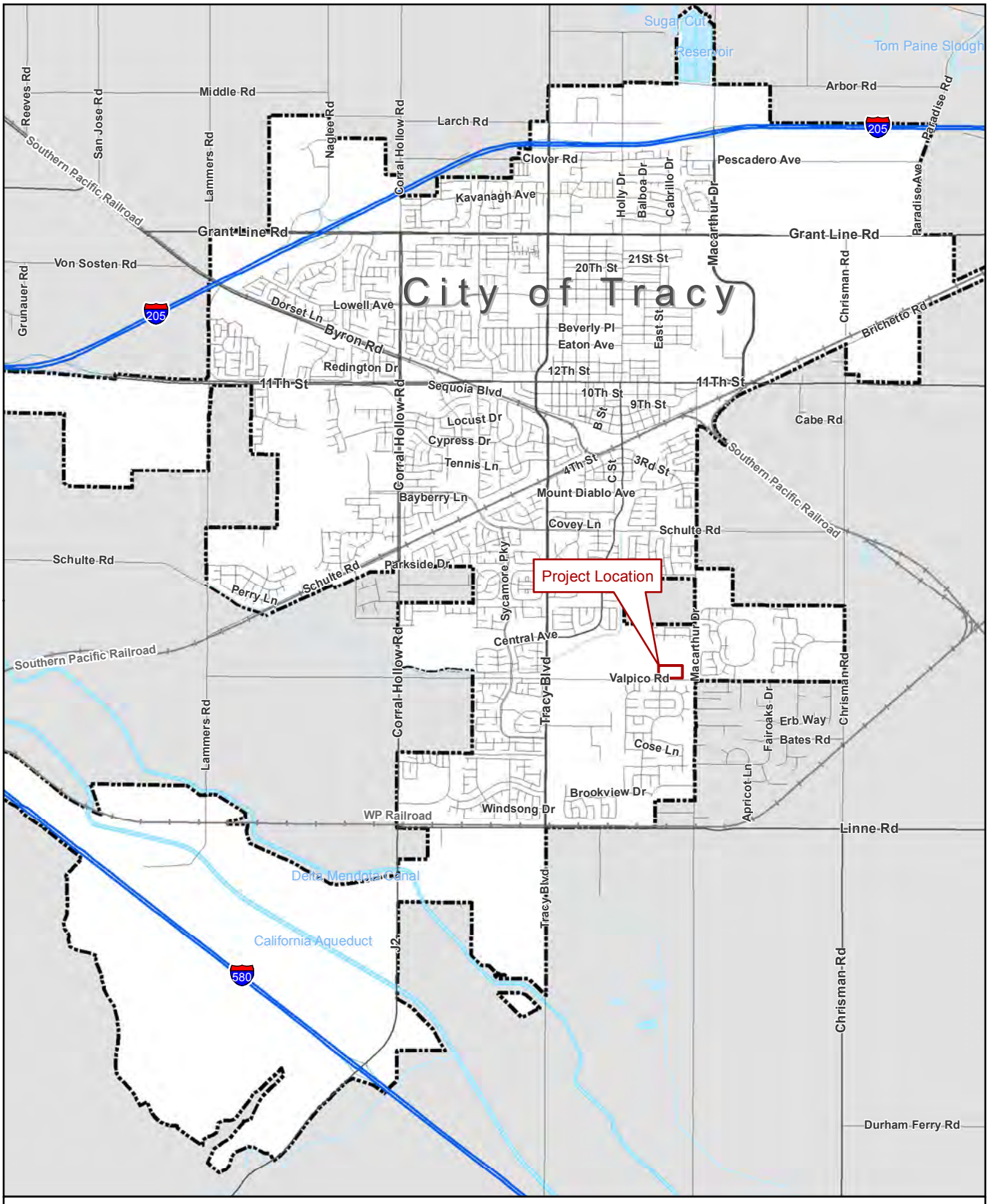
- Central Valley Regional Water Quality Control Board (CVRWQCB) - Storm Water Pollution Prevention Plan (SWPPP) approval prior to construction activities.
- San Joaquin Valley Air Pollution Control District (SJVAPCD) - Approval of construction-related air quality permits.
- San Joaquin Council of Governments (SJCOG)- Review of project application to determine consistency with the San Joaquin County Multi-Species Habitat, Conservation, and Open Space Plan (SJMSCP).

PROJECT GOALS AND OBJECTIVES

The City of Tracy and the project applicant have identified the following goals and objectives for the proposed project:

1. Expand the available supply of high density residential housing options in the City of Tracy, consistent with City Housing Element goals of providing a range of residential densities and products, including high-density apartments
2. Develop a project that is consistent and compatible with the surrounding land uses.
3. Increase the supply of market-rate rental housing units that may be affordable to moderate income households within the City of Tracy.

This page left intentionally blank



Valpico Apartments Development

Figure 1 - Regional Location Map

Data sources: California Spatial Information Library;
ESRI StreetMap North America. Map date: August 25, 2012

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

This page left intentionally blank

N

0 500 1,000

Feet

1:12,000

Valpico Apartments Development

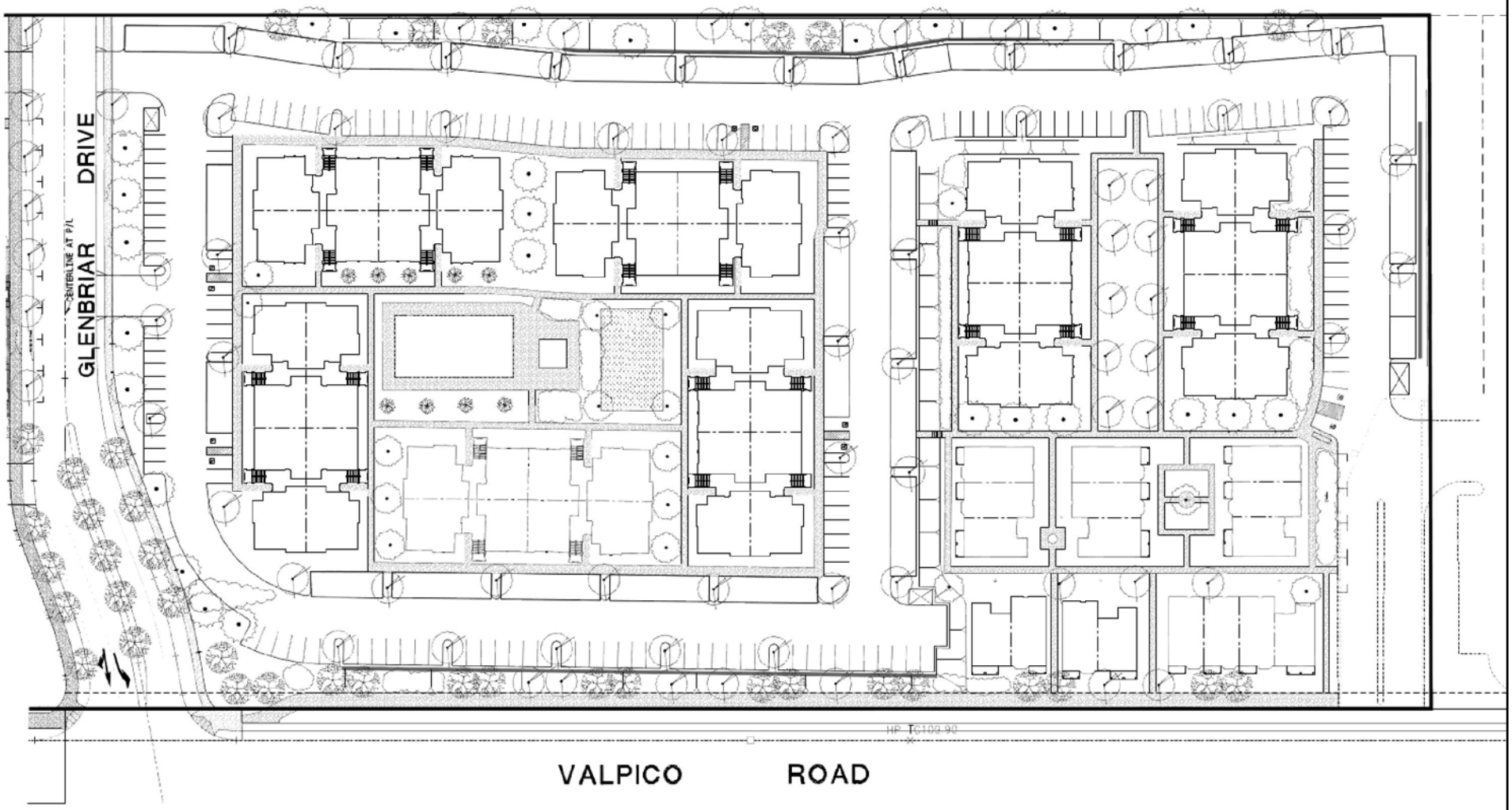
Figure 2 - Project Vicinity Map

Data sources: ArcGIS Online BING aerials; ESRI StreetMap North America. Map date: August 25, 2012

De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank



Valpico Apartments Development

Figure 3 - Site Plan

N

0 30 60

Feet

Data source: MacKay & Somps, Pleasanton, California
Map date: August 25, 2012

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

This page left intentionally blank

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

	Aesthetics		Agriculture and Forest Resources		Air Quality
	Biological Resources		Cultural Resources		Geology/Soils
	Greenhouse Gasses		Hazards and Hazardous Materials		Hydrology/Water Quality
	Land Use/Planning		Mineral Resources		Noise
	Population/Housing		Public Services		Recreation
	Transportation/Traffic		Utilities/Service Systems		Mandatory Findings of Significance

DETERMINATION:

On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature Allan Bell Date 10/12/12

EVALUATION INSTRUCTIONS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a) Earlier Analysis Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances).

Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:
   a) The significance criteria or threshold, if any, used to evaluate each question; and
   b) The mitigation measure identified, if any, to reduce the impact to less than significance

EVALUATION OF ENVIRONMENTAL IMPACTS:

In each area of potential impact listed in this section, there are one or more questions which assess the degree of potential environmental effect. A response is provided to each question using one of the four impact evaluation criteria described below. A discussion of the response is also included.

- Potentially Significant Impact. This response is appropriate when there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries, upon completion of the Initial Study, an EIR is required.
- Less than Significant With Mitigation Incorporated. This response applies when the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact". The Lead Agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.
- Less than Significant Impact. A less than significant impact is one which is deemed to have little or no adverse effect on the environment. Mitigation measures are, therefore, not necessary, although they may be recommended to further reduce a minor impact.
- No Impact. These issues were either identified as having no impact on the environment, or they are not relevant to the Project.

This page left intentionally blank.

ENVIRONMENTAL CHECKLIST

This section of the Initial Study incorporates the most current Appendix "G" Environmental Checklist Form, contained in the CEQA Guidelines. Impact questions and responses are included in both tabular and narrative formats for each of the 18 environmental topic areas.

I. AESTHETICS -- WOULD THE PROJECT:

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Have a substantial adverse effect on a scenic vista?			*X*	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				*X*
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			*X*	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		*X*		

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less Than Significant. There are no scenic vistas located on or adjacent to the project site. The proposed project is considered an infill project, and the proposed uses on the site are consistent and compatible with the surrounding land uses. Lands to the south and east of the project site consist of single-family residential uses. There is a Rite Aid store located immediately east of the project site, along the project site's eastern boundary. The parcel immediately west of the project site has a single home, and is otherwise vacant. Commercial, industrial, and vacant land uses are located further to the west of the project site. The parcel to the north of the project site is mostly vacant, with the exception of a single structure. Single-family residential land uses are located further north of the project site.

Implementation of the proposed project would provide for additional residential development in an area of the City that is largely developed. The project site is not topographically elevated from the surrounding lands, and is not highly visible from areas beyond the immediate vicinity of the site. There are no prominent features on the site, such as trees, rock outcroppings, or other visually distinctive features that contribute to the scenic quality of the site. The project site is not designated as a scenic vista by the City of Tracy General Plan.

Implementation of the proposed project would not significantly change the existing visual character of the project area, as much of the areas immediately adjacent to the site are used for residential and commercial purposes.

Implementation of the proposed project would introduce a high-density residential development to the project area, and would be generally consistent with the surrounding residential and commercial development. Therefore, this impact is considered **less than significant**.

Response b): No Impact. As described in the Tracy General Plan EIR**,** there are two Officially Dedicated California Scenic Highway segments in the Tracy Planning Area, which extend a total length of 16 miles. The first designated scenic highway is the portion of I-580 between I-205 and I-5, which offers views of the Coast Range to the west and the Central Valley's urban and agricultural lands to the east. The second scenic highway is the portion of I-5 that starts at I-205 and continues south to Stanislaus County, which allows for views of the surrounding agricultural lands and the Delta-Mendota Canal and California Aqueduct.

The project site is not visible from any of the above-referenced scenic highways. Development of the proposed project would not result in the removal of any trees, rock outcroppings, or buildings of historical significance, and would not result in changes to any of the viewsheds from the designated scenic highways in the vicinity of the City of Tracy. There is **no impact**.

Response c): Less than Significant. As described under Response a), above, the proposed project would add additional residential uses to an area that currently contains numerous residential and commercial uses. The proposed project would be visually compatible with the surrounding land uses and would not significantly degrade the existing visual quality of the site or the surrounding area. Additionally, the project is subject to the City of Tracy's development and design review criteria, which would ensure that the exterior facades of the proposed residential structures, landscaping, streetscape improvements and exterior lighting improvements are compatible with the surrounding land uses. This is a **less than significant** impact.

Response d): Less than Significant with Mitigation. Daytime glare can occur when the sunlight strikes reflective surfaces such as windows, vehicle windshields and shiny reflective building materials. The proposed project would introduce new residential structures and parking areas into the project site, however, reflective building materials are not proposed for use in the project, and as such, the project would not result in increases in daytime glare.

The proposed project would include exterior lighting around the proposed apartment buildings, parking areas, and common areas within the site. The City of Tracy Standard Plan #154 establishes minimum requirements for light illumination. Exterior lighting on new projects is also regulated by the Tracy Municipal Code, Off-Street Parking Requirements, Section 10.08.3530(h). The City addresses light and glare issues on a case-by-case basis during project approval and typically adds requirements as a condition of project approval to shield and protect against light spillover from one property to the next. The Tracy Municipal Code requires that the site plan and architectural package include the exterior lighting standards and devices, and be reviewed by the Development and Engineering Services Department.

The implementation of Mitigation Measure 1 requires the preparation of a lighting plan, which must demonstrate that exterior project lighting has been designed to minimize light spillage onto adjacent properties to the greatest extent feasible. The implementation of Mitigation Measure 1 would reduce this impact to a **less than significant** level.

Mitigation Measures

***Mitigation Measure 1**: A lighting plan shall be prepared prior to the issuance of a building permit and installation of the project's exterior lighting. The lighting plan shall demonstrate that the exterior lighting systems have been designed to minimize light spillage onto adjacent properties to the greatest extent feasible. The lighting plan shall include the following:*

- *Design of site lighting and exterior building light fixtures to reduce the effects of light pollution and glare off of glass and metal surfaces;*
- *Lighting shall be directed downward and light fixtures shall be shielded to reduce upward and spillover lighting;*

II. AGRICULTURE AND FOREST RESOURCES: WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526)?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

RESPONSES TO CHECKLIST QUESTIONS

Response a): No Impact. The project site in underlain by soils that are considered prime farmland soils by the California Department of Conservation, Farmland Mapping and Monitoring Program and the USDA Soil Conservation Service. The agricultural value of the project site is compromised by a variety of factors that render the site unsuitable for agricultural production or agricultural operations. The project site was historically used as a sand and gravel extraction area, which has resulted in soil disturbances and the removal of topsoil that renders the site unviable for agricultural uses. Additionally, the project site is designated for urban land uses (commercial) by the Tracy General Plan Land Use Designations Map. The project site is surrounded by urban land uses, and there are no agricultural land uses or agricultural operations adjacent to the site. The project site is not irrigated for agricultural use.

Development of the site for urban uses and the subsequent removal of prime farmland soil for agricultural use was taken into consideration in the City of Tracy General Plan and Final EIR. On February 1, 2011 the Tracy City Council adopted a Statement of Overriding Considerations (Resolution 2011-028) for the loss of prime agricultural land resulting from adoption of the Plan and EIR, and provided mitigation measures for the agricultural land lost to development in the City of Tracy's urbanized areas. Mitigation measures included the implementation of a "Right to Farm" ordinance by the City (Ord. 10.24 et seq.), intended to preserve and protect existing agricultural operations within the incorporated City.

The proposed project is identified for urban land uses in the Tracy General Plan. The proposed project is consistent with the overriding considerations that were adopted for the General Plan and the established mitigation measures under that Plan. As such, implementation of the proposed project would not create new impacts over and above those identified in the General Plan Final EIR, nor significantly change previously identified impacts.

There is **no impact** related to this environmental topic, and no additional mitigation is required.

Response b): No Impact. The project site is not under a Williamson Act Contract, nor are any of the parcels immediately adjacent to the project site under a Williamson Act Contract. Therefore, implementation of the proposed project would not conflict with a Williamson Act Contract. The project site is currently zoned Community Shopping by the City's Zoning Map. As such, the proposed project would not conflict with any agricultural zoning or Williamson Act Contract. There is **no impact**.

Responses c) and d): No Impact. The project site is located in an area predominantly consisting of commercial and residential development. There are no forest resources on the project site or in the vicinity of the project site. Therefore, there is **no impact**.

Response e): No Impact. As described under Responses (a) and (b) above, the proposed project is not currently used for agricultural purposes, nor is it designated or zoned for agricultural uses. There are no agricultural lands or operations adjacent to the project site. There is **no impact** related to this environmental topic.

III. AIR QUALITY -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Conflict with or obstruct implementation of the applicable air quality plan?		X		
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		X		
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?		X		
d) Expose sensitive receptors to substantial pollutant concentrations?			X	
e) Create objectionable odors affecting a substantial number of people?			X	

EXISTING SETTING

The project site is located within the boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD). This agency is responsible for monitoring air pollution levels and ensuring compliance with federal and state air quality regulations within the San Joaquin Valley Air Basin (SJVAB) and has jurisdiction over most air quality matters within its borders.

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b), c): Less than Significant with Mitigation. Air quality emissions would be generated during construction of the proposed project and during operation of the proposed project. Operational emissions would come primarily from vehicle emissions from vehicle trips generated by the proposed project. Construction-related air quality impacts and operational air quality impacts are addressed separately below.

Construction-Related Emissions

The SJVAPCD's approach to analysis of construction impacts is to require implementation of effective and comprehensive control measures, rather than to require detailed quantification of emission concentrations for modeling of direct impacts. PM10 emitted during construction can vary greatly depending on the level of activity, the specific operations taking place, the equipment being operated, local soils, weather conditions, and other factors, making quantification difficult. Despite this variability in emissions, experience has shown that there are a number of feasible control measures that can be reasonably implemented to significantly reduce PM10 emissions from construction activities. The SJVAPCD has determined that compliance with Regulation VIII for all sites and implementation of all other control measures

indicated in Tables 6-2 and 6-3 of the *Guide for Assessing and Mitigating Air Quality Impacts* (as appropriate) would constitute sufficient mitigation to reduce PM10 impacts to a level considered less than significant.

Construction would result in numerous activities that would generate dust. The fine, silty soils in the project area and often strong afternoon winds exacerbate the potential for dust, particularly in the summer months. Grading, leveling, earthmoving and excavation are the activities that generate the most particulate emissions. Impacts would be localized and variable. Construction impacts would last for a period of several months. The initial phase of project construction would involve grading and leveling the project site and associated improvements such as parking area improvements and supporting underground infrastructure, such as water, sewer, and electrical lines.

Construction activities that could generate dust and vehicle emissions are primarily related to grading and other ground-preparation activities in order to prepare the project site for the construction of the apartment units and parking areas.

Control measures are required and enforced by the SJVAPCD under Regulation VIII. The SJVAPCD considers construction-related emissions from all projects in this region to be mitigated to a less than significant level if SJVAPCD-recommended PM10 fugitive dust rules and equipment exhaust emissions controls are implemented.

Implementation of Mitigation Measures 2 and 3, in addition to compliance with all applicable measures from SJVAPCD Rule VIII would reduce construction-related impacts associated with dust and construction vehicle emissions to a **less than significant** level.

Mitigation Measures

Mitigation Measure 2*: Prior to the commencement of grading activities, the City shall require the contractor hired to complete the grading activities to prepare a construction emissions reduction plan that meets the requirements of SJVAPCD Rule VIII. The construction emissions reductions plan shall be submitted to the SJVAPCD for review and approval. The City of Tracy shall ensure that all required permits from the SJVAPCD have been issued prior to commencement of grading activities. The construction emissions reduction plan should include the following requirements and measures:*

- *Properly and routinely maintain all construction equipment, as recommended by manufacturer's manuals, to control exhaust emissions.*
- *Shut down equipment when not in use for extended periods of time, to reduce exhaust emissions associated with idling engines.*
- *Encourage ride-sharing and of use transit transportation for construction employees commuting to the project site.*
- *Use electric equipment for construction whenever possible in lieu of fossil fuel-powered equipment.*
- *Curtail construction during periods of high ambient pollutant concentrations.*
- *Construction equipment shall operate no longer than eight cumulative hours per day.*

- *All construction vehicles shall be equipped with proper emission control equipment and kept in good and proper running order to reduce NOx emissions.*
- *On-road and off-road diesel equipment shall use aqueous diesel fuel if permitted under manufacturer's guidelines.*
- *On-road and off-road diesel equipment shall use diesel particulate filters if permitted under manufacturer's guidelines.*
- *On-road and off-road diesel equipment shall use cooled exhaust gas recirculation (EGR) if permitted under manufacturer's guidelines.*
- *Use of Caterpillar pre-chamber diesel engines or equivalent shall be utilized if economic and available to reduce NOx emissions.*
- *All construction activities within the project site shall be discontinued during the first stage smog alerts.*
- *Construction and grading activities shall not be allowed during first stage ozone alerts. (First stage ozone alerts are declared when ozone levels exceed 0.20 ppm for the 1-hour average.)*

Implementation of this mitigation shall occur during all grading or site clearing activities. The SJVAPCD shall be responsible for monitoring.

***Mitigation Measure 3**: The following mitigation measures, in addition to those required under Regulation VIII of the SJVAPCD, shall be implemented by the Project's contractor during all phases of project grading and construction to reduce fugitive dust emissions:*

- *Water previously disturbed exposed surfaces (soil) a minimum of three-times/day or whenever visible dust is capable of drifting from the site or approaches 20 percent opacity.*
- *Water all haul roads (unpaved) a minimum of three-times/day or whenever visible dust is capable of drifting from the site or approaches 20 percent opacity.*
- *All access roads and parking areas shall be covered with asphalt-concrete paving or water sprayed regularly.*
- *Dust from all on-site and off-site unpaved access roads shall be effectively stabilized by applying water or using a chemical stabilizer or suppressant.*
- *Reduce speed on unpaved roads to less than 15 miles per hour.*
- *Install and maintain a trackout control device that meets the specifications of SJVAPCD Rule 8041 if the site exceeds 150 vehicle trips per day or more than 20 vehicle trips per day by vehicles with three or more axles.*
- *Stabilize all disturbed areas, including storage piles, which are not being actively utilized for construction purposes using water, chemical stabilizers or by covering with a tarp, other suitable cover or vegetative ground cover.*
- *Control fugitive dust emissions during land clearing, grubbing, scraping, excavation, leveling, grading or cut and fill operations with application of water or by presoaking.*
- *When transporting materials offsite, maintain a freeboard limit of at least six inches and over or effectively wet to limit visible dust emissions.*
- *Limit and remove the accumulation of mud and/or dirt from adjacent public roadways at the end of each workday. (Use of dry rotary brushes is prohibited except when preceded or*

accompanied by sufficient wetting to limit visible dust emissions and the use of blowers is expressly forbidden.)

- *Remove visible track-out from the site at the end of each workday.*
- *Cease grading activities during periods of high winds (greater than 20 mph over a one-hour period).*
- *Asphalt-concrete paving shall comply with SJVAPCD Rule 4641 and restrict use of cutback, slow-sure, and emulsified asphalt paving materials.*

Implementation of this mitigation shall occur during all grading or site clearing activities. The SJVAPCD shall be responsible for monitoring.

Operational Emissions

For the purposes of this operational air quality analysis, actions that violate Federal standards for criteria pollutants (i.e., primary standards designed to safeguard the health of people considered to be sensitive receptors while outdoors and secondary standards designed to safeguard human welfare) are considered significant impacts. Additionally, actions that violate State standards developed by the CARB or criteria developed by the SJVAPCD, including thresholds for criteria pollutants, are considered significant impacts. Projects that would generate 10 tons per year of either ROG or NOx are considered to have a potentially significant air quality impact. The SJVAPCD has also established a threshold of 15 tons per year for PM10. As previously mentioned, the Basin is classified as a nonattainment area for ozone. In order to achieve the Federal and State standards of ozone, it is necessary to regulate ROG and NOx, which contribute to the formation of ozone. This includes both direct and indirect emissions.

In addition to the tons/year thresholds cited above, the SJVAPCD has thresholds applicable to CO emissions that require projects to perform localized CO modeling. These thresholds include the following:

- Project traffic would impact signalized intersections operating at level of service (LOS) D, E or F or would cause LOS to decline to D, E or F.
- Project traffic would increase traffic volumes on nearby roadways by 10 percent or more.
- The project would contribute to CO concentrations exceeding CAAQS of 9 parts per million (ppm) averaged over 8 hours and 20 ppm for one hour.

Emissions were estimated using the approach included in the 2007 URBEMIS model combined with emissions factors developed by CARB and the SJVAPCD. The URBEMIS model is used to calculate construction and operational emissions associated with land development projects, and includes EPA, SJVAPCD, and CARB emissions factors embedded within it.

As described in greater detail under the traffic impact analysis section in this document, the proposed project would not cause an intersection to decline to LOS D, E, or F. Additionally, the proposed project would not increase traffic volumes on nearby roadways by 10 percent or more. Therefore, localized CO modeling is not warranted for this project.

Rule 9510 Indirect Source Review

District Rule 9510 requires developers of large residential, commercial and industrial projects to reduce smog-forming (NOx) and particulate (PM10 and PM2.5) emissions generated by their projects. The Rule applies to projects which, upon full build-out, will include 50 or more residential units. Project developers are required to reduce:

- 20 percent of construction-exhaust nitrogen oxides;
- 45 percent of construction-exhaust PM10;
- 33 percent of operational nitrogen oxides over 10 years; and
- 50 percent of operational PM10 over 10 years.

Developers are encouraged to meet these reduction requirements through the implementation of on-site mitigation; however, if the on-site mitigation does not achieve the required baseline emission reductions, the developer will mitigate the difference by paying an off-site fee to the District. Fees reduce emissions by helping to fund clean-air projects in the District.

The project would be an indirect source of air pollutants, in that it would attract and cause an increase in vehicle trips in the region. Table 1 shows the new auto emissions from vehicle trips that would result from the proposed project. The San Joaquin Valley Air Pollution Control District has established a threshold of significance for ozone precursors of 10 tons per year, and 15 tons per year has been assumed to represent a significant impact for PM10.

Table 1: Total Project Generated Emissions at Full Buildout

	EMISSIONS (TONS/YEAR)						
	ROG	NOX	CO	SO2	PM10	PM2.5	CO2
Mobile Source Project Emissions	1.53	2.11	17.55	0.02	3.41	0.66	1,912.81
SJVAPCD Threshold	10	10	--	--	15	--	--
Above SJCAPCD Threshold?	No	No	NA	NA	No	NA	NA

EMISSIONS WERE CALCULATED USING THE URBEMIS2007 (V.9.24) COMPUTER PROGRAM. ASSUMES TOTAL BUILDOUT OF THE PROPOSED PROJECT. MOBILE SOURCE EMISSIONS WERE BASED ON THE AVERAGE ANNUAL ADT PRESENTED IN THE TRAFFIC STUDY PREPARED FOR THE PROJECT AND DEFAULT VEHICLE TRIP DISTANCES AND FLEET CHARACTERISTICS CONTAINED IN THE MODEL.

As shown in the table above, project generated emissions are below the SJVAPCD thresholds for ROG, NOx and PM10. As such, the project would result in **less than significant** air quality impacts. However, regardless of the emissions totals presented above, the project is still subject to the requirements of SJVAPCD Rule 9510, which requires developers of large residential, commercial and industrial projects to reduce smog-forming (NOx) and particulate (PM10 and PM2.5) emissions generated by their projects. The Rule applies to projects which

upon full build-out will include 50 or more residential units. Project developers are required to reduce:

- 20 percent of construction-exhaust nitrogen oxides;
- 45 percent of construction-exhaust PM10;
- 33 percent of operational nitrogen oxides over 10 years; and
- 50 percent of operational PM10 over 10 years.

Developers are encouraged to meet these reduction requirements through the implementations of on-site mitigation; however, if the on-site mitigation does not achieve the required baseline emission reductions, the developer will mitigate the difference by paying an off-site fee to the District.

Mitigation Measures

Mitigation Measure 4*: Prior to the issuance of the first building permit, the project applicant shall coordinate with the SJVAPCD to verify that the project meets the requirements of District Rule 9510, which is aimed at the following reductions:*

- *20 percent of construction-exhaust nitrogen oxides;*
- *45 percent of construction-exhaust PM10;*
- *33 percent of operational nitrogen oxides over 10 years; and*
- *50 percent of operational PM10 over 10 years.*

The project applicant shall coordinate with SJVAPCD to develop measures and strategies to reduce operational emissions from the proposed project. If feasible measures are not available to meet the emissions reductions targets outlined above, then the project applicant may be required to pay an in-lieu mitigation fee to the SJVAPCD to off-set project-related emissions impacts. If in-lieu fees are required, the project applicant shall coordinate with the SJVAPCD to calculate the amount of the fees required to off-set project impacts.

Response d): Less than Significant. Sensitive receptors are those parts of the population that can be severely impacted by air pollution. Sensitive receptors include children, the elderly, and the infirm. In addition to the existing residences located adjacent to the project site, there are two elementary schools located in proximity to the project site. Tom Hawkins Elementary is located approximately 0.3 miles south of the project site, and Gladys Poet-Christian Elementary School is located approximately 0.6 miles to the northwest of the project site.

Implementation of the proposed project would not expose these sensitive receptors to substantial pollutant concentrations. Air emissions would be generated during the construction phase of the project. The construction phase of the project would be temporary and short-term, and the implementation of Mitigation Measures 2 and 3 would greatly reduce pollution concentrations generated during construction activities.

Operation of the proposed project would result in emissions primarily from vehicle trips. As described under Response a) – c) above, the proposed project would not generate significant concentrations of air emissions. Impacts to sensitive receptors would be negligible and this is a **less than significant** impact.

Response e): Less than Significant. Operation of the proposed project would not generate notable odors. The proposed project is an apartment complex, which is compatible with the surrounding land uses. Occasional mild odors may be generated during landscaping maintenance (equipment exhaust), but the project would not otherwise generate odors. This is a **less than significant** impact and no mitigation is required.

IV. BIOLOGICAL RESOURCES -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b) 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 Game or US Fish and Wildlife Service?				X
c) 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?			X	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			X	

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant with Mitigation. The project applicant submitted the proposed project plans to the San Joaquin Council of Governments (SJCOG) for review for consistency with the San Joaquin County Multi-Species Habitat and Open Space Plan (SJMSCP). The project site was visited by SJCOG staff to assess the habitat conditions on the project site, and an advisory statement was issued to the applicant by SJCOG on June 13, 2012.

Special-status invertebrates that occur within the San Joaquin County region include: longhorn fairy shrimp, vernal pool fairy shrimp, and midvalley fairy shrimp, which requires vernal pools and swale areas within grasslands; and the valley elderberry longhorn beetle, which is an insect that is only associated with blue elderberry plants, oftentimes in riparian areas and sometimes on land in the vicinity of riparian areas. The project site does not contain essential habitat for

these special status invertebrates. Implementation of the proposed project would have a **less than significant** impact on these species. No mitigation is necessary.

Special-status reptiles and amphibians that occur within the region include: the western pond turtle, which requires aquatic environments located along ponds, marshes, rivers, and ditches; the California tiger salamander, which is found is grassland habitats where there are nearby seasonal wetlands for breeding; the silvery legless lizard, which is found in sandy or loose loamy soils under sparse vegetation with high moisture content; San Joaquin whipsnake, which requires open, dry habitats with little or no tree cover with mammal burrows for refuge; the Alameda whipsnake, which is restricted to valley-foothill hardwood habitat on south-facing slopes; the California horned lizard, which occurs in a variety of habitats including, woodland, forest, riparian, and annual grasslands, usually in open sandy areas; the foothill yellow-legged frog, which occurs in partly shaded and shallow streams with rocky soils; the California red legged frog, which occurs in stream pools and ponds with riparian or emergent marsh vegetation; and the western spadefoot toad, which requires grassland habitats associated with vernal pools. The project site does not contain essential habitat for these special status reptiles and amphibians. Implementation of the proposed project would have a **less than significant** impact on these species. No mitigation is necessary.

Numerous special-status plant species are known to occur in the region. Many of these special status plant species require specialized habitats such as serpentine soils, rocky outcrops, slopes, vernal pools, marshes, swamps, riparian habitat, alkali soils, and chaparral, which are not present on the project site. The project site is located in an area that was likely valley grassland prior to human settlement, and there are several plant species that are found in valley and foothills grasslands areas. These species include large-flowered fiddleneck, bent-flowered fiddleneck, big-balsamroot, big tarplant, round-leaved filaree, Lemmon's jewelflower, and showy golden madia. Human settlement has involved a high frequency of ground disturbance associated with the historical farming activities in the region, including the project site. The project site does not contain suitable habitat for special-status plant species, and no special-status plant species were observed by SJCOG during their visit to the project site. Implementation of the proposed project would have a **less than significant** impact on these species. No mitigation is necessary.

Special-status birds that occur within the region include: tricolored blackbird, Swainson's hawk, northern harrier, and bald eagle, which are associated with streams, rivers, lakes, wetlands, marshes, and other wet environments; loggerhead shrike, and burrowing owl, which lives in open areas, usually grasslands, with scattered trees and brush; and raptors that are present in varying habitats throughout the region.

Swainson's Hawk. The Swainson's hawk is threatened in California and is protected by the California Department of Fish and Game (CDFG) and the Migratory Bird Treaty Act (MBTA). Additionally, Swainson's hawk foraging habitat is protected by the CDFG. Swainson's hawks forage in open grasslands and agricultural fields and commonly nest in solitary trees and riparian areas in close proximity to foraging habitat. The foraging range for Swainson's hawk is ten miles from its nesting location. There are numerous documented occurrences of Swainson's

hawk within ten miles of the project site. Although no nesting habitat for this species occur onsite. As described in the SJCOG advisory statement letter, Swainson's hawks are present within the vicinity of the project site. One adult hawk was observed traversing across the border of the site. The site and the surrounding open non-native grassland habitat will provide medium quality foraging opportunities for local Swainson's hawks. There is a row of 30 eucalyptus trees on the adjacent property bordering the site. These trees are large enough to harbor raptor nests, but do not currently contain any active nests. Incidental take minimization measures are not required for this species due to the fact that there is no suitable nesting habitat on the project site. As such, impacts to Swainson's hawk are **less than significant** and no mitigation is required.

Burrowing Owls. Burrowing owls are a California Species of Special Concern and are protected by the CDFG and the MBTA. Burrowing owls forage in open grasslands and shrublands and typically nest in old ground squirrel burrows. The project site contains suitable, but not high-quality habitat for burrowing owls. The project site is adjacent to other lands that are currently undeveloped that offer foraging and roosting habitat for wintering or breeding owls. However, the burrows that are present on-site are inactive due to the absence of ground squirrels (as indicated by the presence of cobwebs across the burrows' entrances). During the pre-construction surveys completed by SJCOG, no burrowing owls nor evidence of their presence was detected within the project site. No incidental take minimization measures are required for this species because burrowing owls were not detected and California ground squirrels are currently absent on the project site. However, due to the time lapse between the June site surveys conducted by SJCOG and when construction activities are likely to occur if the project is approved, there is the potential for burrowing owls to occupy the site in the interim. While considered unlikely, due to the presence of urban development surrounding the site, this is considered potentially significant impact. The implementation of Mitigation Measure 5 would ensure that burrowing owls are not impacted during construction activities. The implementation of Mitigation Measure 5 would ensure a **less than significant** impact to burrowing owls.

Mitigation Measures

Mitigation Measure 5: *Prior to the commencement of grading activities or other ground disturbing activities on the project site, the project applicant shall arrange for a qualified biologist to conduct a follow-up preconstruction survey for western burrowing owls. If no owls or owl nests are detected, then construction activities may commence. If burrowing owls or occupied nests are discovered, then the following shall be implemented:*

- *During the breeding season (February 1 through September 1) occupied burrows shall not be disturbed and shall be provided with a 75 meter protective buffer until and unless the SJCOG Technical Advisory Committee (TAC), with the concurrence of the Permitting Agencies' representatives on the TAC; or unless a qualified biologist approved by the Permitting Agencies verifies through non-invasive means that either: 1) the birds have not begun egg laying, or 2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. Once the fledglings are capable of independent*

survival, the burrow can be destroyed. They should only be destroyed by a qualified biologist using passive one-way eviction doors to ensure that owls are not harmed during burrow destruction. Methods for removal of burrows are described in the California Department of Fish and Game's Staff Report on Burrowing Owls (October, 1995)

- *During the non-breeding season (September 1 through January 31) burrowing owls occupying the project site should be evicted from the project site by passive relocation as described in the California Department of Fish and Game's Staff Report on Burrowing Owls (Oct., 1995)*

Implementation of this mitigation shall occur prior to grading or site clearing activities. SJCOG shall be responsible for monitoring and a qualified biologist shall conduct surveys and relocate owls as required.

Responses b): No Impact. Riparian natural communities support woody vegetation found along rivers, creeks and streams. Riparian habitat can range from a dense thicket of shrubs to a closed canopy of large mature trees covered by vines. Riparian systems are considered one of the most important natural resources. While small in total area when compared to the state's size, they provide a special value for wildlife habitat.

Over 135 California bird species either completely depend upon riparian habitats or use them preferentially at some stage of their life history. Riparian habitat provides food, nesting habitat, cover, and migration corridors. Another 90 species of mammals, reptiles, invertebrates and amphibians depend on riparian habitat. Riparian habitat also provides riverbank protection, erosion control and improved water quality, as well as numerous recreational and aesthetic values.

There is no riparian habitat or other sensitive natural communities located on the project site. As such, the proposed project would have **no impact** on these resources, and no mitigation is required.

Response c): Less than Significant. A wetland is an area that is inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Wetlands are defined by regulatory agencies as having special vegetation, soil, and hydrology characteristics. Hydrology, or water inundation, is a catalyst for the formation of wetlands. Frequent inundation and low oxygen causes chemical changes to the soil properties resulting in what is known as hydric soils. The prevalent vegetation in wetland communities consists of hydrophytic plants, which are adapted to areas that are frequently inundated with water. Hydrophytic plant species have the ability to grow, effectively compete, reproduce, and persist in low oxygen soil conditions.

Below is a list of wetlands that are found in the Tracy planning area:

- Farmed Wetlands: This category of wetlands includes areas that are currently in agricultural uses. This type of area occurs in the northern portion of the Tracy Planning Area.

- Lakes, Ponds and Open Water: This category of wetlands includes both natural and human-made water bodies such as that associated with working landscapes, municipal water facilities and canals, creeks and rivers.

- Seasonal Wetlands: This category of wetlands includes areas that typically fill with water during the wet winter months and then drain enough to become ideal plant habitats throughout the spring and summer. There are numerous seasonal wetlands throughout the Tracy Planning Area.

- Tidal Salt Ponds and Brackish Marsh: This category of wetlands includes areas affected by irregular tidal flooding with generally poor drainage and standing water. There are minimal occurrences along some of the larger river channels in the northern portion of the Tracy Planning Area.

There are no wetlands located on the project site. Therefore, this is a **less than significant** impact and no mitigation is required.

Response d): Less than Significant. The CNDDB record search did not reveal any documented wildlife corridors or wildlife nursery sites on or adjacent to the project site. Furthermore, the field survey did not reveal any wildlife corridors or wildlife nursery sites on or adjacent to the project site. Implementation of the proposed project would have a **less than significant** impact. No mitigation is necessary.

Responses e), f): Less than Significant. The project site is located within the jurisdiction of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan ("Plan" or "SJMSCP") and is located within the Central/Southwest Transition Zone of the SJMSCP. The San Joaquin Council of Governments (SJCOG) prepared the Plan pursuant to a Memorandum of Understanding adopted by SJCOG, San Joaquin County, the United States Fish and Wildlife Service (USFWS), the California Department of Fish and Game (CDFG), Caltrans, and the cities of Escalon, Lathrop, Lodi, Manteca, Ripon, Stockton, and Tracy in October 1994. On February 27, 2001, the Plan was unanimously adopted in its entirety by SJCOG. The City of Tracy adopted the Plan on November 6, 2001.

According to Chapter 1 of the SJMSCP, its key purpose is to "provide a strategy for balancing the need to conserve open space and the need to convert open space to non-open space uses, while protecting the region's agricultural economy; preserving landowner property rights; providing for the long-term management of plant, fish and wildlife species, especially those that are currently listed, or may be listed in the future, under the Federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA); providing and maintaining multiple use Open Spaces which contribute to the quality of life of the residents of San Joaquin County; and, accommodating a growing population while minimizing costs to project proponents and society at large."

In addition, the goals and principles of the SJMSCP include the following:

- Provide a County-wide strategy for balancing the need to conserve open space and the need to convert open space to non-open space uses, while protecting the region's agricultural economy.
- Preserve landowner property rights.
- Provide for the long-term management of plant, fish, and wildlife species, especially those that are currently listed, or may be listed in the future, under the ESA or the CESA.
- Provide and maintain multiple-use open spaces, which contribute to the quality of life of the residents of San Joaquin County.
- Accommodate a growing population while minimizing costs to project proponents and society at large.

In addition to providing compensation for conversion of open space to non open space uses, which affect plant and animal species covered by the SJMSCP, the SJMSCP also provides some compensation to offset impacts of open space conversions on non-wildlife related resources such as recreation, agriculture, scenic values and other beneficial open space uses. Specifically, the SJMSCP compensates for conversions of open space to urban development and the expansion of existing urban boundaries, among other activities, for public and private activities throughout the County and within Escalon, Lathrop, Lodi, Manteca, Ripon, Stockton, and Tracy.

Participation in the SJMSCP is voluntary for both local jurisdictions and project applicants. Only agencies adopting the SJMSCP would be covered by the SJMSCP. Individual project applicants have two options if their project is located in a jurisdiction participating in the SJMSCP: mitigating under the SJMSCP or negotiating directly with the state and/or federal permitting agencies. If a project applicant opts for SJMSCP coverage in a jurisdiction that is participating under the SJMSCP, the following options are available, unless their activities are otherwise exempted: pay the appropriate fee; dedicate, as conservation easements or fee title, habitat lands; purchase approved mitigation bank credits; or, propose an alternative mitigation plan.

Responsibilities of permittees covered by the SJMSCP include collection of fees, maintenance of implementing ordinances/resolutions, conditioning permits (if applicable), and coordinating with the Joint Powers Authority (JPA) for Annual Report accounting. Funds collected for the SJMSCP are to be used for the following: acquiring Preserve lands, enhancing Preserve lands, monitoring and management of Preserve lands in perpetuity, and the administration of the SJMSCP. Because the primary goal of SJMSCP to preserve productive agricultural use that is compatible with SJMSCP's biological goals, most of the SJMSCP's Preserve lands would be acquired through the purchase of easements in which landowners retain ownership of the land and continue to farm the land. These functions are managed by San Joaquin Council of Governments.

The proposed project is classified as Urban Habitat under the SJMSCP. The City of Tracy and the project applicant have consulted with SJCOG and agreed to allow coverage of the project pursuant to the SJMSCP. SJCOG staff has determined that the proposed project is consistent with the SJMSCP and coverage under the plan has been obtained. Therefore, this is a **less than significant** impact and no additional mitigation is required.

V. CULTURAL RESOURCES -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?		X		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		
d) Disturb any human remains, including those interred outside of formal cemeteries?		X		

RESPONSES TO CHECKLIST QUESTIONS

Response a), b), c), d): Less than Significant with Mitigation. A review of literature maintained by the Central California Information Center of the California Historical Resources Information System at California State University, Stanislaus identified that no previously identified prehistoric period cultural resources are known within, or within a 1/4 mile radius of the project site. Additionally, there are no known unique paleontological or archeological resources known to occur on, or within the immediate vicinity of the project site. Therefore, it is not anticipated that site grading and preparation activities would result in impacts to cultural, historical, archaeological or paleontological resources. There are no known human remains located on the project site, nor is there evidence to suggest that human remains may be present on the project site

However, as with most projects in California that involve ground-disturbing activities, there is the potential for discovery of a previously unknown cultural and historical resource or human remains. This is considered a **potentially significant** impact.

The implementation of Mitigation Measure 6 would require appropriate steps to preserve and/or document any previously undiscovered resources that may be encountered during construction activities, including human remains. Implementation of this measure would reduce this impact to a **less than significant** level.

Mitigation Measures

Mitigation Measure 6: *If any prehistoric or historic artifacts, human remains or other indications of archaeological resources are found during grading and construction activities, an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, shall be consulted to evaluate the finds and recommend appropriate mitigation measures.*

- *If cultural resources or Native American resources are identified, every effort shall be made to avoid significant cultural resources, with preservation an important goal. If significant sites cannot feasibly be avoided, appropriate mitigation measures, such as data recovery excavations or photographic documentation of buildings, shall be undertaken consistent with applicable state and federal regulations.*
  - *If human remains are discovered, all work shall be halted immediately within 50 meters (165 feet) of the discovery, the County Coroner must be notified, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed.*
  - *If any fossils are encountered, there shall be no further disturbance of the area surrounding this find until the materials have been evaluated by a qualified paleontologist, and appropriate treatment measures have been identified.*

VI. GEOLOGY AND SOILS -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation*	*Less Than Significant Impact*	*No Impact*
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?		X		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X

RESPONSES TO CHECKLIST QUESTIONS

Responses a.i), a.ii): Less than Significant. The project site is located in an area of moderate to high seismicity. As described in the Geotechnical Exploration report prepared for the project (Engeo, 2012), no known active faults cross the project site, and the site is not located within an Alquist-Priolo Earthquake Fault Zone, however, relatively large earthquakes have historically occurred in the Bay Area and along the margins of the Central Valley. Many earthquakes of low magnitude occur every year in California. The two nearest earthquake faults zoned as active by the State of California Geological Survey are the Great Valley Fault, located approximately five miles to the west of the site, and the Greenville fault, located approximately 13 miles southwest of the site. The Great Valley fault is a blind thrust fault with no known surface expression; the

postulated fault location has been based on historical regional seismic activity and isolated subsurface information.

Portions of the Great Valley fault are considered seismically active thrust faults; however, since the Great Valley fault segments are not known to extend to the ground surface, the State of California has not defined Earthquake Fault Hazard Zones around the postulated traces. The Great Valley fault is considered capable of causing significant ground shaking at the site, but the recurrence interval is believed longer than for more distant, strike-slip faults. Further seismic activity can be expected to continue along the western margin of the Central Valley, and as with all projects in the area, the project will be designed to accommodate strong earthquake ground shaking, in compliance with the applicable California building code standards.

Other active faults capable of producing significant ground shaking at the site include the Calaveras, 26 miles southwest; the Hayward fault, 28 miles west; the Ortigalita fault, 31 miles southwest; and the San Andreas Fault, 49 miles southwest of the site. Any one of these faults could generate an earthquake capable of causing strong ground shaking at the subject site. Earthquakes of Moment Magnitude (Mw) 7 and larger have historically occurred in the region and numerous small magnitude earthquakes occur every year.

Since there are no known active faults crossing the project site and the site is not located within an Earthquake Fault Special Study Zone, the potential for ground rupture at the site is considered low.

An earthquake of moderate to high magnitude generated within the San Francisco Bay Region and along the margins of the central valley could cause considerable ground shaking at the site, similar to that which has occurred in the past. In order to minimize potential damage to the proposed structures caused by groundshaking, all construction would comply with the latest California Building Code standards, as required by the City of Tracy Municipal Code 9.04.030.

Seismic design provisions of current building codes generally prescribe minimum lateral forces, applied statically to the structure, combined with the gravity forces of dead-and-live loads. The code-prescribed lateral forces are generally considered to be substantially smaller than the comparable forces that would be associated with a major earthquake. Therefore, structures should be able to: (1) resist minor earthquakes without damage, (2) resist moderate earthquakes without structural damage but with some nonstructural damage, and (3) resist major earthquakes without collapse but with some structural as well as nonstructural damage.

Implementation of the California Building Code standards, which include provisions for seismic building designs, would ensure that impacts associated with groundshaking would be **less than significant**. Building new structures for human use would increase the number of people exposed to local and regional seismic hazards. Seismic hazards are a significant risk for most property in California.

The Safety Element of the Tracy General Plan includes several goals, objectives and policies to reduce the risks to the community from earthquakes and other geologic hazards. In particular, the following policies would apply to the project site:

SA-1.1, Policy P1: Underground utilities, particularly water and natural gas mains, shall be designed to withstand seismic forces.

SA-1.1, Policy P2: Geotechnical reports shall be required for development in areas where potentially serious geologic risks exist. These reports should address the degree of hazard, design parameters for the project based on the hazard, and appropriate mitigation measures.

SA-1.2, Policy P1: All construction in Tracy shall conform to the California Building Code and the Tracy Municipal Code including provisions addressing unreinforced masonry buildings.

Implementation of the requirements of the California Building Code and the Tracy General Plan would ensure that impacts on humans associated with seismic hazards would be **less than significant**. No additional mitigation is required.

Responses a.iii), c), d): Less than Significant. Liquefaction normally occurs when sites underlain by saturated, loose to medium dense, granular soils are subjected to relatively high ground shaking. During an earthquake, ground shaking may cause certain types of soil deposits to lose shear strength, resulting in ground settlement, oscillation, loss of bearing capacity, landsliding, and the buoyant rise of buried structures. The majority of liquefaction hazards are associated with sandy soils, silty soils of low plasticity, and some gravelly soils. Cohesive soils are generally not considered to be susceptible to liquefaction. In general, liquefaction hazards are most severe within the upper 50 feet of the surface, except where slope faces or deep foundations are present.

Expansive soils are those that undergo volume changes as moisture content fluctuates; swelling substantially when wet or shrinking when dry. Soil expansion can damage structures by cracking foundations, causing settlement and distorting structural elements. Expansion is a typical characteristic of clay-type soils. Expansive soils shrink and swell in volume during changes in moisture content, such as a result of seasonal rain events, and can cause damage to foundations, concrete slabs, roadway improvements, and pavement sections.

The soils encountered at the site generally consisted of very stiff to hard sandy lean clay, silt, and poorly graded sand with clay and gravel in the upper 3 to 6 feet underlain by interbedded layers of poorly graded gravel with cobbles, clayey gravel, lean clay, silt, and silty sand to the maximum depth explored of 25 feet. One Plasticity Index (PI) test was performed on the near-surface soils at the site and it resulted in a PI of 15. This is an indication that the site soils have a moderate shrink-swell potential and medium plasticity. The subsurface investigations did not encounter any noticeably weak or compressible soil in the exploratory borings.

The potential for liquifaction to occur at the project site is considered low. Additionally, the project site does not contain expansive soils that would pose a significant risk to structures and residents at the project site. As such, this is a **less than significant** impact and no mitigation is required.

Responses a.iv): Less than Significant. The project site is relatively flat and there are no major slopes in the vicinity of the project site. As such, the project site is exposed to little or no risk associated with landslides. This is a **less than significant** impact and no mitigation is required.

Response b): Less than Significant with Mitigation. Construction and site preparation activities associated with development of the project site include grading for the installation for the construction of the proposed apartment buildings, parking areas and landscape areas. During the construction preparation process, existing vegetation would be removed to grade and compact the project site, as necessary. As construction occurs, these exposed surfaces could be susceptible to erosion from wind and water. Effects from erosion include impacts on water quality and air quality. Exposed soils that are not properly contained or capped increase the potential for increased airborne dust and increased discharge of sediment and other pollutants into nearby stormwater drainage facilities. Risks associated with erosive surface soils can be reduced by using appropriate controls during construction and properly revegetating exposed areas. Mitigation Measures 2 and 3 requires the implementation of various dust control measures during site preparation and construction activities that would reduce the potential for soil erosion and the loss of topsoil. Additionally, Mitigation Measure 7 would require the implementation of various best management practices (BMPs) that would reduce the potential for disturbed soils and ground surfaces to result in erosion and sediment discharge into adjacent surface waters during construction activities. The implementation of these required mitigation measures would reduce these impacts to a **less than significant** level and no additional mitigation is required.

Response e): No Impact. The project site would be served by public wastewater facilities and does not require an alternative wastewater system such as septic tanks. Implementation of the proposed project would have **no impact** on this environmental issue.

XII. GREENHOUSE GAS EMISSIONS – WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?			X	

BACKGROUND DISCUSSION

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 2005, concentrations of these three greenhouse gases have increased globally by 36, 148, and 18 percent, respectively (IPCC 2007)[1].

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 (California Energy Commission 2006a) [2]. In California, the transportation

[1] Intergovernmental Panel on Climate Change. 2007. "Climate Change 2007: The Physical Science Basis, Summary for Policymakers."
http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_wg1_report_the_physical_science_basis.htm

[2] California Energy Commission. 2006a. Inventory of California Greenhouse Gas Emissions and Sinks 1990 to

sector is the largest emitter of GHGs, followed by electricity generation (California Energy Commission 2006a).

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 492 million gross metric tons of carbon dioxide equivalents ($MMTCO_2e$) in 2004 (California Energy Commission 2006a). By 2020, California is projected to produce 507 $MMTCO_2e$ per year.[3]

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 2004, accounting for 40.7% of total GHG emissions in the state (California Energy Commission 2006a). This category was followed by the electric power sector (including both in-state and out of-state sources) (22.2%) and the industrial sector (20.5%) (California Energy Commission 2006a).

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 70% to 90% by the end of the 21st century (Cal EPA 2006)[4]. This phenomenon could lead to significant challenges securing an

2004. http://www.arb.ca.gov/cc/inventory/archive/archive.htm

[3] California Air Resources Board. 2010. "Functional Equivalent Document prepared for the California Cap on GHG Emissions and Market-Based Compliance Mechanisms."

4 California Environmental Protection Agency, Climate Action Team. 2006. Climate Action Team Report to Governor Schwarzenegger and the Legislature.
http://www.climatechange.ca.gov/climate_action_team/reports/

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 (Cal EPA 2006). If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion and disruption of wetlands (Cal EPA 2006). 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 (Cal EPA 2006), 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.

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant. The primary source of GHGs from the proposed project would result from emissions of CO2 associated with vehicle trips generated by the project. In order to calculate CO2 emissions from project vehicle trips, the URBEMIS software modeling system was utilized. Based on the total vehicle miles travelled (VMT) as a result of project implementation, the proposed project would generate up to 1,913 tons/year of CO2 from vehicle emissions.

A number of academic and professional studies have demonstrated that the built environment can have a profound effect on travel. According to *Growing Cooler* (ULI, 2008, pg 88), ten studies examined the effects of regional location on travel. The studies yielded the same general conclusion: infill locations generate substantially lower vehicle trips and vehicle miles of travel (VMT) per capita than do greenfield locations (from 13 to 72 percent). Designing projects with greater Densities, access to regional Destinations, site Design, and Diversity of land use (the '4Ds') can result in meaningful reductions in vehicle trips and VMT.

Chapter 1 of *Driving and the Built Environment: The Effects of Compact Development on Motorized Travel, Energy Use, and CO2 Emissions -- Special Report 298* (Transportation Research Board, 2009) reached the following key conclusions:

- Finding 1: Developing more compactly, that is, at higher residential and employment densities, is likely to reduce VMT.
- Finding 2: The literature suggests that doubling residential density across a metropolitan area might lower household VMT by about 5 to 12 percent, and perhaps by as much as 25

percent, if coupled with higher employment concentrations, significant public transit improvements, mixed uses, and other supportive demand management measures.

The City of Tracy has not established a threshold of significance for determining what level of CO2 emissions from vehicle trips is considered a significant impact. The proposed project represents an infill project within the City. Additionally, the project is a high-density residential development, which promotes a compact development pattern, and minimizes the consumption of open space lands and resources. The project provides for additional high-density housing opportunities within the City of Tracy, and would assist the City in achieving the housing goals established in the City's Housing Element. The residential population growth that would occur as a result of project implementation would contribute to the growth anticipated in the City's General Plan and General Plan EIR.

Given the relatively small amount of GHGs that would be generated by the project, coupled with the fact that the project is a high-density residential infill project, this is considered a **less than significant** impact, and no mitigation is required.

Response b): Less than Significant. The City of Tracy recently adopted the Tracy Sustainability Action Plan. The Sustainability Action Plan includes programs and measures to reduce GHGs through community and municipal operations. Programs and measures contained in the Sustainability Action Plan that relate to the proposed project include:

Measure E-1: Implement California Green Building Standards, as contained in Title 24, Part 11, CCR.

Measure T-5 c and d: Which promote the use of alternative transportation measures, including bikes and pedestrian travel, by providing connections to existing bike and pedestrian facilities.

Measure T-3 a: Providing onsite bicycle parking in multi-family development projects.

Measure E-2 e: Requiring energy efficient exterior lighting.

Measure SW-3: Providing opportunities for onsite recycling in multi-family development

The proposed project would assist the City of Tracy with implementation of the Sustainability Action Plan, and is consistent with the measures described above. The proposed project would be constructed in compliance with the California Green Building Standards, and would install energy efficient exterior lighting. The project would provide opportunities for alternative transportation choices by providing connections to adjacent bicycle and pedestrian facilities, and through the provision of bicycle parking areas within the site.

In addition to the City of Tracy's Sustainability Action Plan, SJCOG is in the processes of preparing the Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan (RTP) update. 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 in order to reduce GHG

emissions from passenger vehicles. The SCS is one component of the SJCOG Regional Transportation Plan.

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.

While the SJCOG SCS has not been completed and adopted at the time that this environmental analysis was prepared, the SCS is anticipated to encourage and promote compact land uses that focus on infill development within existing cities in the County. As described above, the proposed project is a high-density infill project that would assist the City of Tracy in meeting its regional housing needs allocation. The proposed project is consistent with the intent of SB 375, and is anticipated to further the goals and priorities of the SJCOG SCS.

Based on the project's consistency with the pending SCS and the City's Sustainability Action Plan, this is a **less than significant** impact and no mitigation is required.

VIII. HAZARDS AND HAZARDOUS MATERIALS -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) 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?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?			X	
f) 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?			X	
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) 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?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant. The proposed project would place new high-density residential uses in an area of the City that currently contains predominantly residential, commercial and light industrial uses. The proposed residential land uses do not routinely transport, use, or dispose of hazardous materials, or present a reasonably foreseeable release of hazardous materials, with the exception of common residential grade hazardous materials such as household cleaners, paint, etc. The operational phase of the proposed project does not pose a significant hazard to the public or the environment. Implementation of the proposed project would have a **less than significant** impact relative to this issue.

Response c): Less than Significant. The project site is not located within ¼ mile of an existing or proposed school, and would therefore, not result in the exposure of any school site to any hazardous materials that may be used or stored at the project site. There are two elementary schools located in proximity to the project site. Tom Hawkins Elementary is located approximately 0.3 miles south of the project site, and Gladys Poet-Christian Elementary School is located approximately 0.6 miles to the northwest of the project site. As described under Response a), above, the project would not involve the use, storage, transport or handling of hazardous materials, beyond those commonly found in typical residential areas. This is a **less than significant** impact and no mitigation is required.

Response d): Less than Significant. According the California Department of Toxic Substances Control (DTSC) there are no Federal Superfund Sites, State Response Sites, or Voluntary Cleanup Sites on, or in the vicinity of the project site.

The DTSC Envirostor Database identified that the Georgia-Pacific Corporation operated a chemical packaging facility at 75 W. Valpico Road (west of the site) in Tracy from 1978 to 1986. A percolation basin being used for the disposal of waste cooling water and stormwater runoff was treated with sodium hypochlorite bleach in July 1984 to mitigate sulfite-type odors, resulting in the formation of chloroform. On 25 September 1984, the Regional Board issued a Cleanup and Abatement order to Georgia-Pacific to stop seepage of pollutants from the storm-water pond and stop pollution of the groundwater and odor nuisance. Starting in October 1984, 150,000 gallons of standing water were pumped out of the basin and disposed offsite. Wastewater flow to the basin was discontinued. The contamination was cleaned to the satisfaction of the Central Valley Regional Water Quality Control Board and the case was closed on November 15, 2011.

A Phase I Environmental Site Assessment (Phase I) was completed for the project site and some adjacent parcels in February 2004 (Baseline Environmental Consulting). The Phase I investigation included a review of environmental investigation reports and historic land use information, interviews, a site reconnaissance, a review of regulatory lists and databases, and the development of recommendations for further actions. The Phase I noted that the project site was historically used for gravel mining, orchards, and limited residential development. Railroad tracks were present on, or near the site from at least 1916 to 1950. A truck depot briefly operated on a portion of the site around 1971. A diesel underground storage tank (UST), which may have been associated with the truck depot, was removed from the site around 1986, without the presence of regulatory oversight. A previous Phase I (2001) identified several environmental issues at or near the project site, including stockpiled soil of unknown origin and pits. In 2001 a Phase II investigation included collection of soil samples from the stockpiles and pits and a soil boring in the former diesel UST area. No evidence of contamination was identified in any of the soil samples.

The 2004 Phase I also noted that no visible evidence of hazardous materials releases that could affect subsurface conditions at the project site was noted during site reconnaissance. As described above, there are no known hazardous materials located on the project site. This is a **less than significant** impact, and no mitigation is required.

Responses e), f): Less than Significant. The Federal Aviation Administration (FAA) establishes distances of ground clearance for take-off and landing safety based on such items as the type of aircraft using the airport.

The Tracy Municipal Airport is the closest airport to the project site, located approximately 1.5 miles southwest of the site. The Airport is a general aviation airport owned by the City and managed by the Parks and Community Services Department. The City of Tracy adopted an Airport Master Plan in 1998, analyzing the impacts to safety on surrounding development from the Tracy Municipal Airport.

The probability of an aircraft accident is highest along the extended runway centerline, and within one mile of the runway end. The Airport Master Plan designates four safety zones in which land use restrictions apply due to proximity to the airport:

1. Runway Protection Zone (RPZ)
2. Inner Approach Zone (PAZ0
3. Outer Approach Zone (OAZ)
4. Overflight Zone (OZ)

Land use constraints in these four zones become progressively less restrictive from the RPZ to the OZ. The proposed project is not located in any of these four safety zones. The proposed project is not located within one mile of the airport, nor along the extended runway centerline. Additionally, there are no private airstrips within the vicinity of the project site. Safety hazards related to the project's proximity to the Tracy Municipal Airport are **less than significant,** and no mitigation is required.

Response g): No Impact. The General Plan includes policies that require the City to maintain emergency access routes that are free of traffic impediments (Objective SA-6.1, P1 and A2). The proposed project does not include any actions that would impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. The project involves the development of residential land uses within an urbanized environment, and would not interfere with any emergency response or evacuation plans. Implementation of the proposed project would result in **no impact** on this environmental topic.

Response h): Less than Significant. The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point, while fuels such as trees have a lower surface area to mass ratio and require more heat to reach the ignition point.

The City has areas with an abundance of flashy fuels (i.e. grassland) in the outlying residential parcels and open lands that when combined with warm and dry summers with temperatures often exceeding 100 degrees Fahrenheit create a situation that results in higher risk of wildland

fires. Most wildland fires are human caused, so areas with easy human access to land with the appropriate fire parameters generally result in an increased risk of fire.

The California Department of Forestry has designated the western and southern edge of the City as having a moderate wildland fire potential. This is predominately a result of the hills and grassland habitat that persists. The proposed project is located in an urbanized area of the City void of wildlands that would be susceptible to wildfires. This is a **less than significant** impact and no mitigation is required.

IX. HYDROLOGY AND WATER QUALITY -- WOULD THE PROJECT:

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Violate any water quality standards or waste discharge requirements?			X	
b) 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 pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) 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 which would result in substantial erosion or siltation on- or off-site?		X		
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?		X		
e) 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?		X		
f) Otherwise substantially degrade water quality?		X		
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			X	
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			X	
i) 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?			X	
j) Inundation by seiche, tsunami, or mudflow?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a): Less than Significant. Wastewater generated by the proposed project would be conveyed to the Tracy Wastewater Treatment Plan (WWTP) for treatment and disposal. The City's wastewater collection system consists of gravity sewer lines, pump stations and the WWTP. Wastewater flows toward the northern part of the City where it is treated at the WWTP and then discharged into the Old River in the southern Sacramento-San Joaquin Delta.

The City's WWTP provides secondary-level treatment of wastewater followed by disinfection. Treated effluent from the WWTP is conveyed to a submerged diffuser for discharge into the Old River. The WWTP has an NPDES permit for discharge into the Old River from the State Regional Water Quality Control Board. The proposed project would add a minimal volume of wastewater to the City's system, and would not produce a volume of wastewater that would significantly affect the City's ability to treat it's wastewater. This is a **less than significant** impact, and no mitigation is required.

Responses b): Less than Significant. The proposed project would not result in the construction of new groundwater wells, nor would it increase existing levels of groundwater pumping. The proposed project would be served by the City's municipal water system. The City of Tracy uses several water sources, including the US Bureau of Reclamation, the South County Water Supply Project (SCWSP), and groundwater. At described in greater detail in the Utilities Section of this document, the City has adequate water supplies to serve the proposed project without increasing the current rate of groundwater extraction.

Groundwater recharge occurs primarily through percolation of surface waters through the soil and into the groundwater basin. The addition of significant areas of impervious surfaces (such as roads, parking lots, buildings, etc.) can interfere with this natural groundwater recharge process. Upon full project buildout, the majority of the project site would be covered in impervious surfaces, which would limit the potential for groundwater percolation to occur on the project site. However, given the relatively large size of the groundwater basin in the Tracy area, the areas of impervious surfaces added as a result of project implementation will not adversely affect the recharge capabilities of the local groundwater basin. The proposed project would result in **less than significant** impacts related to groundwater and groundwater recharge. No mitigation is required.

Responses c), d), e), f): Less than Significant with Mitigation. When land is in a natural or undeveloped condition, soils, mulch, vegetation, and plant roots absorb rainwater. This absorption process is called infiltration or percolation. Much of the rainwater that falls on natural or undeveloped land slowly infiltrates the soil and is stored either temporarily or permanently in underground layers of soil. When the soil becomes completely soaked or saturated with water or the rate of rainfall exceeds the infiltration capacity of the soil, the rainwater begins to flow on the surface of land to low lying areas, ditches, channels, streams, and rivers. Rainwater that flows off of a site is defined as storm water runoff. When a site is in a natural condition or is undeveloped, a larger percentage of rainwater infiltrates into the soil and a smaller percentage flows off the site as storm water runoff.

The infiltration and runoff process is altered when a site is developed with urban uses. Houses, buildings, roads, and parking lots introduce asphalt, concrete, and roofing materials to the landscape. These materials are relatively impervious, which means that they absorb less rainwater. As impervious surfaces are added to the ground conditions, the natural infiltration process is reduced. As a result, the volume and rate of storm water runoff increases. The increased volumes and rates of storm water runoff may result in flooding if adequate storm drainage facilities are not provided.

Development of the project site would place impervious surfaces on approximately 5.38 acres of the 8.75-acre project site. Development of the project site would potentially increase local runoff production, and would introduce constituents into storm water that are typically associated with urban runoff. These constituents include heavy metals (such as lead, zinc, and copper) and petroleum hydrocarbons. Best management practices (BMPs) will be applied to the proposed site development to limit the concentrations of these constituents in any site runoff that is discharged into downstream facilities to acceptable levels. Stormwater flows from the project site would be directed to the existing stormwater conveyance system along Valpico Road, south of the project site.

The project would be designed and constructed with a temporary storm drainage system that would remain in place until the downstream storm drain system is constructed with the project to the north of the site (Tiburon Village) as indicated in the City's Stormwater Master Plan. A Drainage Analysis for the proposed project was completed in May 2012 by MacKay and Somps. The proposed temporary drainage system is described below.

Stormwater Infiltration Trench

As proposed, the infiltration trench runs parallel with the north and east property lines of the site. Stormwater flows enter the infiltration trench via catch basins and area drains and are transported to a perforated pipe located near the bottom of the trench. This perforated pipe is the primary conduit of conveyance and storage of stormwater flows. It functions to allow water to flow freely along the length of the infiltration trench and be transported to those areas with the highest percolation potential based on previous soils testing. The infiltration trench will be backfilled with Caltrans Class II Permeable Material (Specification 68-1.025) placed around the pipe to the top of the infiltration trench. This material is placed un-compacted and is expected to have a 40% or greater void space throughout, providing additional storage volume to contain the design storm. The sides and top of the permeable material is wrapped in a permeable fiber fabric to prevent fines from migrating into the trench and reducing the potential storage capacity.

Stormwater Design- Storage

Based on the City's design criteria, a 10-year, 48-hour storm event with rainfall depth of 3.12 inches was used to determine the rainfall volumes. The storm depths and volumes were distributed over a 48 hour period based on the "HEC-1 balanced area distribution" method and the City's rainfall intensity curve as shown on Figure 5-1 of the City's Design Standards. As required by the City's Design Standards, a back to back 48 hour storm was added (96 hour

period) in the completed calculations. Due to the high infiltration rate, the second 48 hour event begins without any stormwater within the drainage system. It should be noted that the rainfall depth as measured at the Tracy Press and determined by NOAA for a 48 hour 10 year event is 2.17 inches. As a result, the 3.12 inch depth used in the project's stormwater calculations is a conservative measurement.

The Outflow, or infiltration potential, of the drainage trench was developed based on the surface area of the proposed infill trench and the 75 gallons per day per square foot. In-flow and Out-flow characteristics were compared side by side in order to determine the maximum volume contained within the underground basin during the design storm. The maximum storage volume occurred at hour 27 of the first storm event and resulted in 15.882 cubic feet of storage required. Similarly, since the second storm occurs when the system is empty, the maximum storage volume for the second storm event occurred at the 75th hour with the same peak volume.

The construction of the temporary stormwater conveyance and detention system, as described above, would ensure that the project is consistent with all applicable plans and regulations related to stormwater conveyance and detention, and would ensure that offsite or onsite flooding does not occur during the design storm event. The potential for the project to exceed the capacity of the stormwater system is a **less than significant** impact.

In order to ensure that stormwater runoff from the project site does not adversely increase pollutant levels in adjacent surface waters and stormwater conveyance infrastructure, Mitigation Measure 7 requires the preparation of a Stormwater Pollution Prevention Plan (SWPPP). As described below, the SWPPP would require the application of best management practices (BMPs) to effectively reduce pollutants from stormwater leaving the site during both the construction and operational phases of the project. The implementation of this mitigation measure would reduce this impact to a **less than significant** level. Additionally, the project is subject to the requirements of Chapter 11.34 of the Tracy Municipal Code – Stormwater Management and Discharge Control. The purpose of this Chapter is to *"Protect and promote the health, safety and general welfare of the citizens of the City by controlling non-stormwater discharges to the stormwater conveyance system, by eliminating discharges to the stormwater conveyance system from spills, dumping, or disposal of materials other than stormwater, and by reducing pollutants in urban stormwater discharges to the maximum extent practicable."*

This chapter is intended to assist in the protection and enhancement of the water quality of watercourses, water bodies, and wetlands in a manner pursuant to and consistent with the Federal Water Pollution Control Act (Clean Water Act, 33 USC Section 1251 et seq.), Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et seq.) and National Pollutant Discharge Elimination System ("NPDES") Permit No. CAS000004, as such permit is amended and/or renewed.

Mitigation Measures

Mitigation Measure 7*: The project applicant shall prepare a Storm Water Pollution Prevention Plan (SWPPP) that includes specific types and sources of stormwater pollutants, determine the location and nature of potential impacts, and specify appropriate control measures to eliminate any potentially significant impacts on receiving water quality from stormwater runoff. The SWPPP shall require treatment BMPs that incorporate, at a minimum, the required hydraulic sizing design criteria for volume and flow to treat projected stormwater runoff. The SWPPP shall comply with the most current standards established by the Central Valley RWQCB. Best Management Practices shall be selected from the City's Manual of Stormwater Quality Control Standards for New Development and Redevelopment according to site requirements and shall be subject to approval by the City Engineer and Central Valley RWQCB.*

Responses g), h): Less than Significant. The 100-year floodplain denotes an area that has a one percent chance of being inundated during any particular 12-month period. The risk of a site within the 100-year floodplain being flooded in any century is one percent but statistically the risk is almost 40 percent in any 50-year period.

Floodplain zones are determined by the Federal Emergency Management Agency (FEMA) and used to create Flood Insurance Rate Maps (FIRMs). These tools assist cities in mitigating flooding hazards through land use planning. FEMA also outlines specific regulations for any construction, whether residential, commercial, or industrial within 100-year floodplains.

The project site is not located within the FEMA designated 100-year floodplain. This is a **less than significant** impact and no mitigation is required.

Responses i), j): Less than Significant. The project site is located within the inundation risk area for San Luis Reservoir and New Melones Dams. The safety of dams in California is stringently monitored by the California Department of Water Resources, Division of Safety of Dams (DSD). In the unlikely event of a dam failure, there is the potential that the project site could become inundated with water. The DSD is responsible for inspecting and monitoring the dam in perpetuity. The proposed project would not result in actions that could result in a higher likelihood of dam failure at San Luis Reservoir and New Melones Dams. There will always be a remote chance of dam failure that results in flooding of the City of Tracy, including the project site. However, given the regulations provided in the California Dam Safety Act, and the ongoing monitoring performed by the DSD, the risk of loss, injury, or death to people or structures from dam failure is considered **less than significant**.

There are no significant bodies of water near the project site that could result in the occurrence of a seiche or tsunami. Additionally, the project site and the surrounding areas are essentially flat, which precludes the possibility of mudflows occurring on the project site. This is a **less than significant** impact and no mitigation is required.

X. LAND USE AND PLANNING - Would the project:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a): No Impact. The project site is surrounded by residential, commercial and light industrial land uses. The project is an infill project that would be consistent and compatible with the surrounding land uses, and would not divide an established community. There is **no impact.**

Responses b): Less than Significant. The project site is currently designated Commercial by the City of Tracy General Plan Land Use Designations Map and is zoned Community Shopping. The proposed project includes a request for a General Plan Amendment to designate the site Residential High, and a zoning change to zone the site High Density Residential.

The proposed uses on the project site are consistent with the General Plan designation of Residential High. Approval of the requested General Plan Amendment would ensure that the proposed project is consistent with the Tracy General Plan. The project's consistency with other General Plan policies that provide environmental protections are addressed within the relevant sections of this document. This is a **less than significant** impact, and no mitigation is required.

Response c): Less than Signification. As described under the Biological Resources section of this document, the proposed project is classified as Urban Habitat under the SJMSCP. The City of Tracy and the project applicant have consulted with SJCOG and agreed to allow coverage of the project pursuant to the SJMSCP. SJCOG staff has determined that the proposed project is consistent with the SJMSCP and coverage under the plan has been obtained. Therefore, this is a **less than significant** impact and no additional mitigation is required.

XI. MINERAL RESOURCES -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			X	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant. As described in the Tracy General Plan EIR, the main mineral resources found in San Joaquin County, and the Tracy Planning Area, are sand and gravel (aggregate), which are primarily used for construction materials like asphalt and concrete. According to the California Geological Survey (CGS) evaluation of the quality and quantity of these resources, the most marketable aggregate materials in San Joaquin County are found in three main areas:

- ♦ In the Corral Hollow alluvial fan deposits south of Tracy
- ♦ Along the channel and floodplain deposits of the Mokelumne River
- ♦ Along the San Joaquin River near Lathrop

Figure 4.8-1 of the General Plan EIR identifies Mineral Resource Zones (MRZs) throughout the Tracy Planning Area. The project site is located within an area designated as MRZ-3. The MRZ-3 designation applies to areas containing mineral deposits the significance of which cannot be evaluated from available data.

The project site was previously used for sand and gravel extraction. Therefore, it is likely that all usable aggregate materials for the project site have already been removed, and there is little potential for additional usable materials to be present at the project site. Therefore, the project would not result in the loss of availability of a known mineral resource. This impact is considered **less than significant**

XII. NOISE -- WOULD THE PROJECT RESULT IN:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) 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?			X	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		X		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			X	
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant. The proposed project is located in an area consisting predominately of residential land uses. Commercial and light industrial land uses are also located in the project vicinity. The primary sources of noise currently present in the project area are from vehicle traffic along MacArthur Drive and Valpico Road.

The City of Tracy General Plan establishes allowable noise exposure levels for new multi-family residential land uses. As described under Goal N-1, Objective N-1.1, Policy P.6 of the Tracy General Plan, *"For new multi-family residential land uses, noise from external sources shall not cause the community outdoor recreation areas to exceed 65 Ldn. This policy shall not apply to balconies."*

In order to estimate noise levels at the project site from roadway noise along MacArthur Drive and Valpico Road, information from the MacArthur Drive Widening Noise Study Report (JC Brennan and Associates, June 2012) was reviewed and utilized. The MacArthur Drive Widening Noise Study Report included measurements of noise levels at a study location at 2675 South MacArthur Drive, approximately 60 feet from the roadway centerline, and approximately 480

feet to the east/northeast of the project site. At this study location, the loudest-hour sound level average (over a 24-hour period) measured at this location was 64 dBALeq, with peak hour vehicle trip volumes of 673 vehicles per hour. The eastern edge of the project site is approximately 520 feet from the roadway centerline of MacArthur Drive, which would further reduce the exposure to traffic noise from this roadway. It is estimated that roadway noise from MacArthur Drive would be approximately 51 dBA at the project's eastern boundary line.

According to the analysis contained in the MacArthur Drive Widening Noise Study report, peak hour vehicle trips along Valpico Road were anticipated to reach 930 vehicles per hour in the project vicinity. This roadway traffic volume would equate to a peak hour noise average of approximately 63dBA at a distance of 120 feet from the roadway centerline. The nearest residential structures within the project site are located approximately 120 feet from the centerline of Valpico Road. Therefore, the proposed project would not be subject to roadway noise in excess of 65dBA in the exterior areas of the site.

As described above, the proposed project would not be subjected to vehicle roadway noise in excess of 65dBA in the exterior areas of the site. This is a **less than significant** impact and no mitigation is required.

Response b): Less than Significant. No major stationary sources of groundborne vibration were identified in the project area that would result in the long-term exposure of proposed onsite land uses to unacceptable levels of ground vibration. In addition, the proposed project would not involve the use of any major equipment or processes that would result in potentially significant levels of ground vibration that would exceed these standards at nearby existing land uses. However, construction activities associated with the proposed project would require the use of various tractors, trucks, and potentially jackhammers that could result in intermittent increases in groundborne vibration levels. The use of major groundborne vibration-generating construction equipment/processes (i.e., blasting, pile driving) is not anticipated to be required for construction of the proposed project.

Groundborne vibration levels commonly associated with construction equipment are summarized in Table 2. Based on the levels presented in Table 2, groundborne vibration generated by construction equipment would not be anticipated to exceed approximately 0.09 inches per second ppv at 25 feet. Predicted vibration levels would not be anticipated to exceed recommended criteria for structural damage and human annoyance (0.2 and 0.1 in/sec ppv, respectively) at nearby land uses. As a result, short-term groundborne vibration impacts would be considered **less than significant** and no mitigation is required**.**

Table 2: Representative Vibration Source Levels for Construction Equipment

EQUIPMENT	*PEAK PARTICLE VELOCITY AT 25 FEET (IN/SEC)*
Large Bulldozers	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozers	0.003
Source: FTA 2006, Caltrans 2004	

Response c): Less than Significant. 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 planning criteria or ordinances, or substantially increase noise levels at noise-sensitive land uses.

The proposed project would not directly generate increased noise beyond those activities commonly found in residential developments (i.e., lawnmowers, leaf blowers, etc.). The noise directly generated by the project would not differ from the existing ambient noises currently generated by the surrounding residential land uses.

The proposed project may indirectly increase ambient noise levels in the project vicinity through the introduction of additional vehicle trips to area roadways, particularly Valpico Road and MacArthur Drive. The Traffic Impact Study prepared for the project estimates that the project would generate up 122 vehicle trips during the P.M. peak hour. Approximately 55 percent of these trips (67 trips in the peak hour) would travel west from the project site on Valpico Road. Therefore, this segment of Valpico Road has the greatest potential to see increases in vehicle noise attributable to the proposed project during the P.M. peak hour. As described above, this segment of Valpico Road currently experiences up to 930 peak hour vehicle trips. The addition of 67 peak hour trips attributable to the proposed project would represent an increase of 7.2 percent in peak hour vehicle trips. The addition of 67 peak hour vehicle trips to Valpico Road during the P.M. peak hour would result in an increased roadway dBA of less than one decibel above existing ambient conditions. This very minor increase in roadway noise would not be perceptible in the project area. As such, this is a **less than significant** impact and no mitigation is required.

Response d): Less than Significant with Mitigation. Contruction activities at the project site would result in temporary increases in noise levels that could expose adjacent residences to increased noise levels and noise nuisances. Construction activities could create temporary noise levels of up to 90 dBA at distances of 50 feet. Because the project site is surrounded by existing residential neighborhoods, this temporary increase in construction noise is considered potentially significant.

The following mitigation measure would place restrictions on the time of day that construction activities can occur, and includes additional techniques to reduce noise levels at adjacent residences during construction activities. The implementation of this mitigation measure would reduce this temporary impact to a **less than significant** level.

Mitigation Measures

Mitigation Measure 8*: The following mitigation measures shall be implemented:*

a) *Construction activities (excluding activities that would result in a safety concern to the public or construction workers) shall be limited to between the hours of 7:00 a.m. and 7:00 p.m. Construction activities shall be prohibited on Sundays and federal holidays.*

b) *Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations.*

c) *Construction equipment staging areas shall be located at the furthest distance possible from nearby noise-sensitive land uses.*

Response e): Less than Significant. The Tracy Municipal Airport is the closest airport to the project site, located approximately 1.5 miles southwest of the site. The Airport is a general aviation airport owned by the City and managed by the Parks and Community Services Department. The City of Tracy adopted an Airport Master Plan in 1998, analyzing the impacts to safety on surrounding development from the Tracy Municipal Airport.

The San Joaquin County Airport Land Use Plan establishes noise contours surrounding the Tracy Municipal Airport. As shown on Figure 4.14-3 of the Tracy General Plan Final Supplemental EIR (Certified on February 1, 2011), the project site is located outside of both the 65 dBCNEL and the 60 dBCNEL noise contours for the Tracy Municipal Airport. As such, the project site would not be exposed to excessive noise from the Tracy Municipal Airport. This is a **less than significant** impact, and no mitigation is required.

Response f): No Impact. The project site is not located within two miles of a private airstrip. There is **no impact**.

XIII. POPULATION AND HOUSING -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) 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)?			X	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant. Implementation of the project would result in the construction of 184 multi-family housing units on the project site. The proposed project is located in an urbanized area of the City of Tracy, and constitutes an infill project. There is existing infrastructure (roads, water, sewer, etc) in the immediate vicinity of the project site. While the project would extend these services onto the site to serve the proposed development, the project would not extend infrastructure to an area of the City not currently served. Therefore, while the project may directly induce population growth through the provision of 184 new high-density residences, the project would not indirectly induce population growth in other areas of the City of Tracy.

The potential for the project to directly induce population growth in the City of Tracy is not a significant impact in and of itself. Population growth can result in impacts to other environmental topics, such as traffic, service demands, etc. As described throughout this environmental document, the population growth attributable to the proposed project would not result in any significant environmental impacts to other environmental topics that cannot be mitigated to a less than significant level. While this document acknowledges that project approval would provide for additional housing opportunities in the City of Tracy, which may lead to population growth in the City, this impact is **less than significant**, as demonstrated throughout this document. No additional mitigation is required.

Responses b), c): No Impact. There are no existing homes or residences located on the project site. There is **no impact**.

XIV. PUBLIC SERVICES

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?			X	
ii) Police protection?			X	
iii) Schools?		X		
iv) Parks?		X		
v) Other public facilities?			X	

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant.

i) Fire Protection and Emergency Medical Services

The Tracy Fire Department, as a member agency of the South County Fire Authority, provides fire protection, life safety, and emergency response services to 167 square miles of the southern part of San Joaquin County. In 1999, the South County Fire Authority was established to more effectively and efficiently serve the City of Tracy, the Tracy Rural Fire Protection District (FPD), and the Mountain House Community Services District (CSD).

The Fire Authority currently operates seven fire stations and an administrative office. Twenty-four hour-a-day staffing is provided with five paramedic engine companies, two basic life support engine companies, and one ladder truck company. Three fire stations are within the incorporated area of the City of Tracy, three are in the surrounding rural Tracy area, and one is located in the planned Community of Mountain House.

Medical transport is provided by private ambulance. American Medical Response is the exclusive emergency ambulance service provider in San Joaquin County.

The Tracy Fire Department has 74.94 full-time equivalent (FTE) fire fighters/ fire station staff, and an additional 4.30 FTE civilian staff. The 2010 ratio of fire fighters per 1,000 population was 0.9 certified fire fighters per 1,000 population.

The Tracy Fire Department conducted a Standards of Response Coverage study in late 2007. Findings of the study indicated that the Department has challenges in meeting its established response time objectives in the areas of the West Valley Mall and Downtown Tracy utilizing existing resources. The Department is currently in the process of mitigating the deficiency in the area of the West Valley Mall through the potential relocation of an existing fire station. Future development will create a need for expanded fire and emergency medical services.

Currently the Department is working on a plan to expand its ability to deliver Advanced Life Support services from all seven Fire Department facilities. Since November 2008, the Fire Department has expanded its provision of Advanced Life Support Services to six of the seven fire stations; there are plans to provide these services from the final station upon successful relocation of the facility, which is expected to be completed in fiscal year 2012/2013. Emergency medical services in Tracy and the surrounding areas are reported to be good, as Tracy is one of only three fire departments in San Joaquin County that provide Advanced Life Support services, and there are no reported concerns about the level of service provided.

Recognizing the potential need for increases in fire protection and emergency medical services, the City's General Plan includes policies to ensure that adequate related facilities are funded and provided to meet future growth (Objective PF-1.1, P1). This policy will be implemented through the review of all new projects within the SOI, prior to development, and through the collection of development impact fess for the funding of facilities.

The project site and the surrounding area is served by Fire Station #97, which is located at 595 West Central Avenue, approximately 0.8 miles west of the project site. The project site is located within the Fire Department's 5-minute response zone.

Implementation of the proposed project would not adversely impact existing fire and emergency services within the City, and would not require the construction of new fire protection facilities.

In order to provide adequate fire protection and suppression services to the project site, the Tracy Fire Department must have access to adequate onsite hydrants with adequate fire-flow pressure available to meet the needs of fire suppression units. The final site plans and development specifications developed for the proposed project will indicate the location and design specifications of the fire hydrants that will be required within the project site. This is a **less than significant** impact.

ii) Police Protection

The Tracy Police Department provides police protection services to the City of Tracy. Its headquarters are located at 1000 Civic Center Drive, and there are no satellite offices or plans to construct any in the near future. The Department currently employs 91 officers, and responded to over 72,500 calls for service in 2008. The Department also has 43 non-sworn positions, which include both full- and part-time administrators, communications dispatchers, community services personnel, animal control, crime scene technicians, and a records

superintendent. The City has a goal of a 5-minute response time for Priority 1 calls (life threatening situations).

The police station is located approximately 2 miles north of the project site. The Department divides calls for service into three categories:

- Priority 1 calls are defined as life threatening situations.
- Priority 2 calls are not life threatening, but require immediate response.
- Priority 3 calls cover all other calls received by the police.

The average response time for Priority 1 calls within the City limits is approximately seven to nine minutes. Response time for Priority 2 and 3 calls is, on average, between 20 and 30 minutes. The Tracy Police Department provides mutual aid to the San Joaquin County Sheriff's office, and vice versa, when a situation exceeds the capabilities of either department. Mutual aid is coordinated through the San Joaquin County Sheriff.

It is not anticipated that implementation of the proposed project would result in significant new demand for police services. Project implementation would not require the construction of new police facilities to serve the project site, nor would it result in impacts to the existing response times and existing police protection service levels. This is a **less than significant** impact.

iii) Schools

Implementation of the proposed project would result in population growth within the City of Tracy, which would likely increase enrollment at schools within the Tracy Unified School District. According to the School District's boundary maps, new elementary school students residing at the project site would attend Louis A. Bohn Elementary School, middle school students would attend Earle E. William Middle School, and high school students would attend Tracy High School.

Under the provisions of SB 50, a project's impacts on school facilities are fully mitigated via the payment of the requisite new school construction fees established pursuant to Government Code Section 65995. Payment of the applicable impact fees by the project applicant, and ongoing revenues that would come from taxes, would ensure that project impacts to school services are **less than significant.**

Mitigation Measures

Mitigation Measure 9: *Prior to the issuance of a building permit, the applicant shall pay applicable school fees mandated by SB 50 to the Tracy Unified School District and provide a receipt of payment to the Tracy Development Services Department.*

iv) Parks

Potential project impacts to parks and recreational facilities are addressed in the following section of this document.

v) Other Public Facilities

Other public facilities in the City of Tracy include libraries, hospitals, and cultural centers such as museums and music halls. The proposed project would increase demand on these facilities. The City of Tracy General Plan requires new development to pay its fair share of the costs of public buildings by collecting the Public Buildings Impact Fee. The Public Buildings Impact fee is used by the City to expand public services and maintain public buildings, including the Civic Center and libraries in order to meet the increased demand generated by new development. Payment of the applicable impact fees by the project applicant, and ongoing revenues that would come from taxes, would ensure that project impacts to libraries and public buildings are **less than significant.**

Mitigation Measures

Mitigation Measure 10: *Prior to the issuance of a building permit, the applicant shall pay applicable Public Building Impact Fees to the City of Tracy.*

XV. RECREATION

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

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant with Mitigation. The proposed project would increase demand for parks and recreational facilities within the City of Tracy, and would increase the use of the City's existing parks and recreation system. As described in the Tracy General Plan, the City maintains 48 mini-parks, 15 neighborhood parks, and eight community parks, providing approximately 256 acres at 71 sites. The City is also in the process of constructing the Holly Sugar Sports Park at the northern edge of the City, which will provide an additional 166 acres of sports parks, 86 acres of passive recreation area, and a 46-acre future expansion area for additional park facilities.

The City strives to maintain a standard of 4 acres of park land for every 1,000 persons. In order to maintain this standard, the City requires new development projects to either include land dedicated for park uses, or to pay in-lieu fees towards the City's parks program. Chapter 13.12 of the Tracy Municipal Code states that, *"all development projects shall be required to maintain the City standard of four (4) acres of park land per 1,000 population. All development projects, as a condition of approval of any tentative parcel map or tentative subdivision map, or as a condition of approval of any building permit, shall dedicate land to the City or pay a fee in lieu thereof, or a combination of both, in order to maintain this City standard. The precise obligation of any development project to dedicate land or pay a fee pursuant to this section shall be incorporated in the implementing resolution for the park fee applicable to the development project."*

The payment of the project's fair share in-lieu parks fees to the City of Tracy, as required by the following mitigation measure, would ensure that this is a **less than significant** impact.

Mitigation Measures

Mitigation Measure 11: *Prior to the issuance of a building permit, the applicant shall pay applicable Park Development Impact Fees to the City of Tracy.*

XVI. TRANSPORTATION/TRAFFIC -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?			X	
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?			X	
c) 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?			X	
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
e) Result in inadequate emergency access?			X	
f) Result in inadequate parking capacity?			X	
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X

RESPONSES TO CHECKLIST QUESTIONS

Response a), b): Less than Significant. In order to determine potential impacts related to traffic generated by the proposed project, a Traffic Impact Study was prepared by TJKM Transportation Consultants in April 2012. In consultation with staff from the City of Tracy, it was determined that the intersections of Glenbriar Drive/Valpico Road and MacArthur Drive/Valpico Road were the two intersections with the greatest potential to be impacted by the proposed project. These two intersections were addressed in the traffic study to determine if the project would result in an unacceptable level of service (LOS) under either existing (near-term) conditions or cumulative (future) conditions with the addition of traffic generated by the proposed project.

Level of service is a qualitative measure describing operational conditions at an intersection. The LOS generally describes these conditions in terms of average delay per vehicle. Six levels of service are defined and given letter designations from A to F, with LOS A representing the best operating conditions and LOS F the worst. The City of Tracy General Plan has established LOS D as the City's desired operating level for intersections. Therefore, the proposed project may

result in a significant impact if the addition of project traffic causes one of the study intersections to operate at a condition worse than LOS D.

Existing Roadway Network

S. MacArthur Drive runs north and south and is located to the east of the project site. It is a four-lane roadway with a median turn lane and the roadway is designated as a truck route. A bike lane exists on both sides of the roadway. It is fronted mainly by residential developments.

Valpico Road runs east west and is adjacent and located to the south of the project site. It is generally a two to four-lane roadway in the project vicinity and designated as a major arterial in the City's Roadway Master Plan.

Glenbriar Drive is a local street that runs north-south and primarily provides access to local residents of the Glenbriar Subdivision located to the south of Valpico Road.

Existing Intersection Traffic Counts

In preparing the traffic study, TJKM conducted two-hour peak hour turning movement counts during a typical weekday in March 2012. The counts collected were two-hour turning movement counts conducted during the weekday a.m. and weekday p.m. peak periods. In addition, TJKM collected the existing signal timing information for both the intersections and used it as inputs for the levels of service analysis.

Table 3 summarizes the results of the intersection analysis under Existing Conditions for the a.m. and p.m. peak hours. The detailed LOS calculations are contained in Appendix B of the Traffic Study, which is available for review at the Tracy Development Services Department. Under Existing Conditions, all the study intersections operate at LOS C or better during both the a.m. and p.m. peak hours. Level of service worksheets are provided in Appendix C of the Traffic Study.

Table 3: Intersection LOS- Existing Conditions

INTERSECTION	CONTROL	EXISTING CONDITIONS					
		A.M. PEAK			P.M. PEAK		
		DELAY	V/C	LOS	DELAY	V/C	LOS
Glenbriar Drive/Valpico Road	Signal	16.1	0.62	B	14.7	0.65	B
MacArthur Drive/Valpico Road	Signal	33.3	0.61	C	30.2	0.51	C

NOTE: DELAY=OVERALL AVERAGE INTERSECTION DELAY IN SECONDS FOR SIGNALIZED INTERSECTIONS

Project Trip Generation

TJKM developed estimated project trip generation for the proposed project based on the published trip generation rates from the Institute of Transportation Engineers' (ITE) publication *Trip Generation (8th Edition).* TJKM also followed the guidance of ITE's *Trip*

Generation Handbook (2nd Edition) to use the fitted curve rate equations for the proposed apartment projects. ITE Land Use Codes of 220 for Apartments was used in the trip generation calculation.

Based on ITE *Trip Generation*, the proposed project is expected to generate approximately 1,269 daily trips on a typical weekday, including 96 trips (19 inbound, 77 outbound) during the a.m. peak hour and 122 trips (79 inbound and 43 outbound) during the p.m. peak hour. The proposed project's estimated trips are shown in Table 4.

Table 4: Project Trip Generation

LAND USE (ITE CODE)	SIZE	DAILY TRIPS	A.M. PEAK					P.M. PEAK				
			IN %	OUT %	IN	OUT	TOTAL	IN %	OUT %	IN	OUT	TOTAL
Valipico Apts (220)	189* du	1,269	20	80	19	77	96	65	35	79	43	122

** The TJKM Traffic Study assumed 189 units. However, the project now proposes 184 units, resulting in a minor decrease of the traffic impacts described in the Traffic Study.*

Project Trip Distribution and Assignment

Trip distribution is a process that determines in what proportion vehicles would travel between a project site and various destinations outside the project study area. The process of trip assignment determines the various routes that vehicles would take from the project site to each destination using the calculated trip distribution.

Trip distribution assumptions for the proposed project were developed based on existing travel patterns, knowledge of the study area, and input from City staff. Trips generated by the proposed project are expected to travel to and from the site according to the distribution assumptions described below:

- 55 percent will travel to/from the west via Valpico Road
- 20 percent will travel to/from the east via Valpico Road
- 15 percent will travel to/from the north via S MacArthur Drive
- 10 percent will travel to/from the south via S MacArthur Drive

Level of Service Analysis- Existing plus Project Conditions

Table 5 shows the results of the LOS analysis for the study intersections under Existing plus Project Conditions. It is assumed that the approach of the proposed roadway on Valpico Road will include a left-turn lane and a shared through and right-turn lane. It is assumed that the existing northbound approach on Glenbriar Drive will continue to operate with a shared left-through-right turn lane. Consequently, the future signal timing for the north-south approach would operate as split-phased. With the addition of the proposed project trips, both study

intersections are expected to continue operating at LOS C or better. LOS worksheets are provided in Appendix D of the Traffic Study.

Table 5: Intersection LOS- Existing plus Project Conditions

INTERSECTION	CONTROL	EXISTING CONDITIONS						EXISTING + PROJECT CONDITIONS					
		A.M. PEAK			P.M. PEAK			A.M. PEAK			P.M. PEAK		
		DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS
Glenbriar Dr/Valpico Rd	Signal	16.1	0.62	B	14.7	0.65	B	30.6	0.69	C	28.6	0.5	C
MacArthur Dr/Valpico Rd	Signal	33.3	0.61	C	30.2	0.51	C	33.8	0.63	C	30.4	0.54	C

NOTE: DELAY=OVERALL AVERAGE INTERSECTION DELAY IN SECONDS FOR SIGNALIZED INTERSECTIONS

As shown in the table above, the addition of traffic generated by the proposed project would cause the intersection of Glenbriar Drive and Valpico Road to decrease from LOS B to LOS C during both the A.M. and P.M. peak hour periods. The intersection of MacArthur Drive and Valpico Road would continue to operate at LOS C during both the A.M. and P.M. peak hour periods with the addition of project traffic. None of the study intersections would operate at LOS D or worse under existing plus project conditions. As such, under existing plus project conditions, the proposed project would have a **less than significant** impact, and no mitigation is required.

Cumulative plus Project Traffic Analysis

Based on discussions with City staff, the Traffic Study used the 2025 cumulative base volumes from the study that was completed for the previously proposed Valpico Town Center Project (2004). This scenario utilized estimated traffic from the base Cumulative Conditions with the addition of the currently estimated project trips.

Table 6 shows the results of the LOS analysis for the study intersections under Cumulative plus Project Conditions. With the addition of the trips from the proposed project, both the study intersections are expected to continue operating at LOS C or better. Level of service worksheets are provided in Appendix F of the Traffic Study.

Table 6: Intersection LOS- Cumulative plus Project Conditions

INTERSECTION	CONTROL	CUMULATIVE + PROJECT CONDITIONS					
		A.M. PEAK			P.M. PEAK		
		DELAY	V/C	LOS	DELAY	V/C	LOS
Glenbriar Drive/Valpico Road	Signal	26.4	0.32	C	23.7	0.55	C
MacArthur Drive/Valpico Road	Signal	26.0	0.39	C	29.9	0.62	C

NOTE: DELAY=OVERALL AVERAGE INTERSECTION DELAY IN SECONDS FOR SIGNALIZED INTERSECTIONS

As shown in the table above, under Cumulative plus Project Conditions, both of the study intersections would continue to operate at LOS C, which is above the threshold of LOS D. Therefore, under cumulative conditions, the proposed project would have a **less than significant** impact on intersection operations, and no mitigation is required.

Response c): Less than Significant. The Tracy Municipal Airport is the closest airport to the project site, located approximately 1.5 miles southwest of the site. The Airport is a general aviation airport owned by the City and managed by the Parks and Community Services Department. The City of Tracy adopted an Airport Master Plan in 1998, analyzing the impacts to safety on surrounding development from the Tracy Municipal Airport.

The probability of an aircraft accident is highest along the extended runway centerline, and within one mile of the runway end. The Airport Master Plan designates four safety zones in which land use restrictions apply due to proximity to the airport:

1. Runway Protection Zone (RPZ)
2. Inner Approach Zone (PAZ0
3. Outer Approach Zone (OAZ)
4. Overflight Zone (OZ)

Land use constraints in these four zones become progressively less restrictive from the RPZ to the OZ. The proposed project is not located in any of these four safety zones. The proposed project is not located within one mile of the airport, nor along the extended runway centerline. Additionally, there are no private airstrips within the vicinity of the project site. Implementation of the proposed project would not result in any needed changes to airport operations or air travel patterns at the Tracy Municipal Airport. This impact is **less than significant,** and no mitigation is required.

Responses d) and e): **Less than Significant.** Based on the preliminary site plan, there is a steep eight percent downgrade from the top of the intersection at Valpico Road/ Glenbriar Drive to the bottom of the level grade. TJKM worked closely with the designer to ensure that the proposed roadway is acceptable based on safety and ease of access. Initially the design consisted of two reverse curves without a transitional tangent between the two curves. Subsequently, a transition was provided between the two reverse curves, which made the design acceptable.

The proposed site plan for the Valpico Apartments provides three driveways to the site. One is an existing driveway at the southeast corner of the site to Valpico Road that currently provides access to the adjacent Rite Aid store. This driveway will provide right-in and right-out turning movements plus left-in movements from east-bound Valpico Road. The other two driveways will be on the west side of the site to the proposed extension of Gleanbriar Drive. The Glenbriar driveways will provide full right-in and right-out access and connection to the signalized intersection of Valpico Road and Glenbriar Drive.

Glenbriar Drive is anticipated, eventually, to be extended north to Stalsburg Drive as the property north of the proposed Valpico Apartments site is developed. Since Glenbriar Drive

will provide access to residential neighborhoods, and not a short cut for through traffic, it will remain a primarily local-serving street.

Based on the site plan, a 20-foot wide travel lane would be provided for each direction of traffic flow on the future Glenbriar Drive. This should be adequate to allow for on-street parking on each side of the street.

The proposed site plan provides adequate access to the project site, which would accommodate emergency vehicles and provide for LOS C or better on adjacent roadways. Implementation of the proposed project would have a less than significant impact related to emergency access, and would not interfere with an emergency evacuation plan. This is a **less than significant** impact and no mitigation is required.

Response f): Less than Significant. The proposed project includes 362 on-site parking spaces, approximately half of which would be covered. This yields approximately two parking spaces per residential unit. Section 10.08.3480 of the Tracy Municipal Code identifies parking requirements for residential projects. Multi-family residential projects are required to provide a minimum of 1.5 parking spaces per one-bedroom residential unit, 2.0 spaces per unit with two or more bedrooms, and an additional "guest" parking space for every five residential units. The project includes 90 one-bedroom units and 94 units with two or more bedrooms. Based on City standards, the proposed 184-unit project, therefore, would be required to provide a minimum of 360 parking spaces. The project proposes 362 parking spaces, which meets the City's minimum requirements. This is a **less than significant** impact and no mitigation is required.

Response g): No Impact. The project would have no impact on any existing plans or policies related to alternative transportation. The proposed project includes onsite parking for bicycles, and provides connections to the existing bicycle lanes in the project area on Valpico Road. Project implementation would assist the City in providing connections and access to alternative transportation in the project area. There is **no impact**.

XVII. UTILITIES AND SERVICE SYSTEMS -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c) 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?			X	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			X	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?			X	
f) Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a) and e): Less than Significant. Wastewater generated by the proposed project would be conveyed to the Tracy Wastewater Treatment Plan (WWTP) for treatment and disposal. The City's wastewater collection system consists of gravity sewer lines, pump stations and the WWTP. Wastewater flows toward the northern part of the City where it is treated at the WWTP and then discharged into the Old River in the southern Sacramento-San Joaquin Delta.

The City's WWTP provides secondary-level treatment of wastewater followed by disinfection. Treated effluent from the WWTP is conveyed to a submerged diffuser for discharge into the Old River. The WWTP has an NPDES permit for discharge into the Old River from the State Regional Water Quality Control Board. The City of Tracy currently has plans to expand and improve the existing Tracy Wastewater Treatment Plant. These plans have been evaluated in the Draft and

Final EIR for the Tracy Wastewater Treatment Plant Expansion (SCH No. 2000012039). The Final EIR was completed in September of 2002 and was certified in November 2002. The City plans to expand the average dry weather flow treatment capacity of the Plant from 9.0 million gallons per day to 16.0 million gallons per day. The expansion would also result in improvements to the quality of the effluent discharged from the Plant by upgrading the facility from secondary to tertiary treatment. The expansion of the Wastewater Treatment Plant is occurring in four phases. The phase expanding the treatment capacity to 10.8 mgd was completed in 2008. The final phase of the four phases is projected to be completed in the year 2014.

The City's WWTP currently treats approximately 9.0 mgd of wastewater. For this analysis, a unit generation factor of 176 gallons per day of wastewater per residential unit was used. Therefore, the proposed project would generate up to 33,264 gallons per day of wastewater, or 0.0033 mgd of wastewater. The addition of 0.0033 mgd of wastewater would not exceed the treatment capacity of the City's WWTP. No improvements or expansions to the existing WWTP are required, and the addition of project-generated wastewater would not result in any RWQCB violations related to effluent treatment or discharge. Implementation of the proposed project would have a **less than significant** impact and no mitigation is required.

Responses b) and d): Less than Significant. Potable water for the proposed project would be supplied from the City's municipal water system. The project site would receive potable water via a connection to an existing water main located on Valpico Road. The proposed project's water demand was calculated in a technical memorandum prepared by West Yost Associates. It is estimated that the proposed project would increase the demand for municipal water supplies by 55 acre feet per year (afy), which accounts for residential water usage, the proposed swimming pool, landscape irrigation, and unaccounted-for water (UAFW). The peak hour demand for water was determined to be 115.9 gallons per minute and 0.17 million gallons per day.

The City of Tracy obtains water from both surface water and groundwater sources. The amount of water that Tracy uses from each of its water supply sources to make up its total water use varies from year to year based on contractual agreements, annual precipitation, and City policies about how to expand, utilize, and manage its water resources. As described in the 2011 City of Tracy Urban Water Management Plan- Public Review Draft, Tracy's maximum annual water supply amounts to over 31,500 acre feet per year from its various supply sources. Future agreements may increase the City's available water supply to over 49,500 acre feet per year.

In recent years, demand for potable water in the City of Tracy has been trending downward. The 2010 total water demand in the City was 16,603 afy. The addition of the project's water demand would not exceed the City's available water supply. The City's water treatment and conveyance infrastructure is adequate to serve existing demand, in addition to the demand created by the proposed project. This is a **less than significant** impact and no mitigation is required.

Responses c): Less than Significant. Development of the project site would place impervious surfaces on approximately 5.38 acres of the 8.75-acre project site. Development of the project site would potentially increase local runoff production, and would introduce constituents into storm water that are typically associated with urban runoff. These constituents include heavy metals (such as lead, zinc, and copper) and petroleum hydrocarbons. Best management practices (BMPs) will be applied to the proposed site development to limit the concentrations of these constituents in any site runoff that is discharged into downstream facilities to acceptable levels.

The project would be designed and constructed with a temporary storm drainage system that would remain in place until the downstream storm drain system is constructed with the project to the north of the site (Tiburon Village) as indicated in the City's Stormwater Master Plan. A Drainage Analysis for the proposed project was completed in May 2012 by MacKay and Somps. The proposed temporary drainage system is described below.

Stormwater Infiltration Trench

As proposed, the infiltration trench runs parallel with the north and east property lines of the site. Stormwater flows enter the infiltration trench via catch basins and area drains and are transported to a perforated pipe located near the bottom of the trench. This perforated pipe is the primary conduit of conveyance and storage of stormwater flows. It functions to allow water to flow freely along the length of the infiltration trench and be transported to those areas with the highest percolation potential based on previous soils testing. The infiltration trench will be backfilled with Caltrans Class II Permeable Material (Specification 68-1.025) placed around the pipe to the top of the infiltration trench. This material is placed un-compacted and is expected to have a 40% or greater void space throughout, providing additional storage volume to contain the design storm. The sides and top of the permeable material is wrapped in a permeable fiber fabric to prevent fines from migrating into the trench and reducing the potential storage capacity.

Stormwater Design- Storage

Based on the City's design criteria, a 10-year, 48-hour storm event with rainfall depth of 3.12 inches was used to determine the rainfall volumes. The storm depths and volumes were distributed over a 48 hour period based on the "HEC-1 balanced area distribution" method and the City's rainfall intensity curve as shown on Figure 5-1 of the City's Design Standards. As required by the City's Design Standards, a back to back 48 hour storm was added (96 hour period) in the completed calculations. Due to the high infiltration rate, the second 48 hour event begins without any stormwater within the drainage system. It should be noted that the rainfall depth as measured at the Tracy Press and determined by NOAA for a 48 hour 10 year event is 2.17 inches. As a result, the 3.12 inch depth used in the project's stormwater calculations is a conservative measurement.

The Outflow, or infiltration potential, of the drainage trench was developed based on the surface area of the proposed infill trench and the 75 gallons per day per square foot. In-flow and Out-flow characteristics were compared side by side in order to determine the maximum

volume contained within the underground basin during the design storm. The maximum storage volume occurred at hour 27 of the first storm event and resulted in 15.882 cubic feet of storage required. Similarly, since the second storm occurs when the system is empty, the maximum storage volume for the second storm event occurred at the 75th hour with the same peak volume.

The construction of the temporary stormwater conveyance and detention system, as described above, would ensure that the project is consistent with all applicable plans and regulations related to stormwater conveyance and detention, and would ensure that offsite or onsite flooding does not occur during the design storm event. The potential for the project to exceed the capacity of the stormwater system is a **less than significant** impact.

Responses f) and g): Less than Significant. The City of Tracy has an exclusive franchise agreement with Tracy Disposal Service for solid waste collection and disposal and recycling collection. Solid waste is collected and taken to the 40-acre Tracy Material Recovery Facility (MRF) and Transfer Station on South MacArthur Drive before being sent to the Foothill Sanitary landfill, 48 miles northeast of Tracy, off of Shelton Road east of Linden, California. The MRF is operated by Tracy Material Recovery and Solid Waste Transfer, Inc., and has capacity of approximately 1,000 tons per day, but averages approximately 350 tons per day, of which 85 percent is generated in Tracy. Approximately 175,000 tons of solid waste is generated in Tracy each year, of which approximately 27 percent is residential garbage.

The approximately 800-acre Foothill landfill, owned by San Joaquin County, is the primary disposal facility accepting the City's solid waste. The Foothill landfill receives approximately 810 tons per day. The landfill is permitted to accept up to 1,500 tons per day, and has a permitted capacity of 51 million tons, of which approximately 45 million tons of capacity remains. It is estimated that the Foothill landfill will have the capacity to accept solid waste from the City of Tracy until 2054.

The proposed project would not generate significant volumes of solid waste, beyond levels normally found in residential developments. The proposed project would not generate hazardous waste or waste other than common household solid waste. As described above, there is adequate landfill capacity to serve the proposed project. This is a **less than significant** impact.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE --

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

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b), c): Less than Significant. As described throughout the analysis above, the proposed project would not result in any significant impacts to the environment that cannot be mitigated to a less than significant level. The proposed project is required to implement mitigation measures that would reduce any potentially significant impacts to a less than significant level. The project would not result in any cumulative impacts, impacts to biological resources or impacts to cultural and/or historical resources. These are **less than significant** impacts.

REFERENCES

- City of Tracy General Plan and EIR (City of Tracy, 2011)
- California Important Farmlands 2010 Map (California Department of Conservation, September 2012)
- 2007 Ozone Plan, 2007 PM10 Plan and the Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI), prepared by the San Joaquin Valley Air Pollution Control District.
- Meteorology Today: An Introduction to Weather, Climate, & the Environment, 2003, D.C. Ahrens
- Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004. (Staff Final Report), California Energy Commission, 2006
- City of Tracy Airport Master Plan (P&D Aviation, 1998)
- City of Tracy Manual of Stormwater Quality Standards for New Development and Redevelopment (Larry Walker Associates, 2008)
- City of Tracy Storm Drainage Master Plan (1994)
- Drainage Analysis for Valpico and MacDonald Apartments (MacKay and Somps, May 10, 2012)
- Geotechnical Exploration, Valpico Apartments (Engeo Inc., February 27, 2012)
- Phase I Environmental Site Assessment, Battaglia Property (Advanced GeoEnvironmental, Inc., January 3, 2001)
- Phase I Site Assessment, Valpico/MacArthur Development Projects (Baseline Environmental Consulting, February 2004)
- Preliminary Site Assessment Phase II Report, Battaglia Property (Advanced GeoEnvironmental, Inc., February 23, 2001)
- Wastewater System Fee for Valpico Apartments (CH2MHill, July 2012)
- Traffic Impact Study for the Proposed 189 Units Valpico Apartments and 60 Units MacDonald Apartments (TJKM Transportation Consultants, April 25, 2012)
- Hydraulic Evaluation of Valpico and MacDonald Apartments (West Yost Associates, July 16, 2012)